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WHERE THE BOILERS ARE

A SURVEY OF ELECTRIC UTILITY BOILERS WITH POTENTIAL CAPACITY FOR BURNING SOLID WASTE AS FUEL

GORDIAN ASSOCIATES, INCORPORATED

PREPARED FOR
ENVIRONMENTAL PROTECTION AGENCY

1974

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Barry G. Tunnah, Adel Hakki, and Roger J. Leonard

8. Performing Organization Rept. No.

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299 Park Avenue
New York, New York 10017

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The use of prepared solid waste as a supplementary fuel is being investigated by communities all over the country as a method for recovering energy from commercial and residential solid wastes. This document presents survey results that are intended to help local decision-makers in assessing the availability of electric utility boilers with potential for using prepared solid waste as supplementary fuel. For the major coal-burning States and the major urban centers, details are given for investor-owned and municipally-owned plants on the following items: (1) boiler characteristics; (2) energy requirements for electricity generation; (3) potential energy available from combustion of solid waste derived from specified areas around each plant; (4) typical transportation distances from the centers of waste generation to the plants, and (5) the potential waste-burning capacity per day of each boiler if solid waste replaced 10 percent of its fossil fuel.

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Waste-based energy
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FOREWORD

Growing concern for the environment, combined with awareness that supplies of material and energy are limited, has resulted in an expanding effort to conserve resources and to develop new resources without damaging the environment. One of the most practical approaches to sensible resource management is the recovery and reuse of materials heretofore discarded as waste.

Over the past several years, communities all over the country have begun to investigate resource recovery as a waste management option. Among the various methods being considered for recovering energy from the waste stream is the use of prepared solid waste as a supplementary fuel in utility power plant boilers. As described in the background section of this report, this approach is being demonstrated by the City of St. Louis and the Union Electric Company with support to the city from the U.S. Environmental Protection Agency.

The purpose of this report, prepared for EPA by Gordian Associates, Inc., New York City, is to provide the basic data that a State or local decision-maker needs to begin considering the opportunities (potential markets) for using solid waste as a fuel in electric utility power plant boilers. With the survey data provided in this report, the decision-maker can focus on specific boilers in discussions with utility officials.

The reader should be aware, however, that this data by itself does not say whether a utility will or even can burn solid waste in its boilers. There are important technical and economic factors--different for each utility--that determine a utility's ability or willingness to use waste as a fuel. These factors are outside the scope of this study but nevertheless must be considered. Some of them are listed in Appendix I.

In developing a resource recovery system, information about potential markets is essential in selecting and implementing a resource recovery technology. Although the electric utility is only one of several possible markets for waste-based energy, this study is intended to provide some of the necessary information about the electric utility as a potential market for solid waste as a fuel.

Arsen J. Darnay
Deputy Assistant Administrator
Office of Solid Waste Management Programs
U.S. Environmental Protection Agency

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WHERE THE BOILERS ARE

SUMMARY

This document presents survey results that are intended to help local decision-makers in assessing the availability of utility boilers with potential for using prepared solid waste as a supplementary fuel.

Power plants originally designed to fire coal, even if they have subsequently been modified to burn oil, normally have the bottom ash handling and air pollution control equipment necessary for burning solid waste. Consequently, this study covers not only the major coal-burning States, but also the major urban centers, many of which may have oil-fired boilers originally designed to fire coal.

Details are given for investor-owned and municipally-owned plants on the following items, based on 1971 data and projections for 1975: (1) boiler characteristics; (2) energy requirements for electricity generation; (3) potential energy available from combustion of solid waste derived from specified areas around each plant or group of plants; (4) typical transportation distances from the centers of waste generation to the plants, and (5) the potential waste-burning capacity per day of each boiler if it replaced 10 percent of its fossil fuel with solid waste fuel. The study does not investigate the potential economic, technical, administrative, or legal problems which may be involved in solid waste combustion.

To verify or update any of the data in this report, the reader can determine for himself the potential waste-burning capacity of nearby boilers by using the nomograph (See "How To Use The Data") and boiler data obtained from the utility.

BACKGROUND

Recovering energy from solid waste is a practice that is being increasingly recognized as both environmentally sound and economically attractive.

Energy recovery from solid waste has been practiced in Europe for several decades. There, solid waste is burned on grates in boilers specifically designed to handle the waste as either supplementary or primary fuel.

In the United States, however, there are no investor-owned utility boilers designed specifically to burn solid waste. Most of these boilers burn fossil fuels in suspension. Consequently, in order to burn solid waste in existing boilers while avoiding costly boiler modifications such as the installation of firing grates, the technique of preparing solid waste for suspension firing was developed.

Use of solid waste as supplementary fuel in existing power plant boilers was initially studied in 1968 by the Union Electric Company and the City of St. Louis, with financial support from the Federal solid waste management program. The results of the study were encouraging, and in 1970 a demonstration project was initiated. The U.S. Environmental Protection Agency's Office of Solid Waste Management Programs and Office of Air Programs jointly awarded a grant to the City of St. Louis for two-thirds of the cost of the project. The Union Electric Company provided its technical expertise, two 125-megawatt tangentially fired boilers, and nearly a million dollars for the demonstration.

Operations began in April 1972 and continued intermittently until May 1973. At that time an air classifier was installed in the system in order to reduce pneumatic feeder jamming and pipeline erosion that prevented continuous operation of the facility. Operations ceased while the air classifier was being installed and resumed in November 1973 with initiation of a comprehensive testing program.

The process itself is relatively simple (Figure 1). Domestic solid waste, collected from residential areas of the city of St. Louis, is ground up in a large hammermill. The shredded waste is air-classified, and the light combustible waste fraction is fired pneumatically into existing boilers in the Union Electric Company system. Magnetic metals are recovered from the heavier, mostly noncombustible, fraction and are sold for recycling to the Granite City (Illinois) Steel Company. The remaining glass, ceramics, and other nonmagnetic materials are landfilled. All of this has been achieved by applying existing technology and using equipment that is already commercially available.

The system was designed so that the solid waste initially would replace 10 percent of the boiler's coal requirement. Experience has shown that 15 to 20 percent fuel replacement rates can now be considered realistic. It also appears that solid waste can be used economically in almost any boiler that has bottom ash handling and air pollution control facilities. This includes tangentially-fired, front-fired, opposed-fired, cyclone-fired, and stoker-fired boilers. It also includes boilers currently burning gas or oil, although boiler manufacturers conservatively recommended an initial fuel replacement ratio no greater than 10 percent with oil.

PROCESSING PLANT FOR SOLID WASTE, ST. LOUIS PROJECT

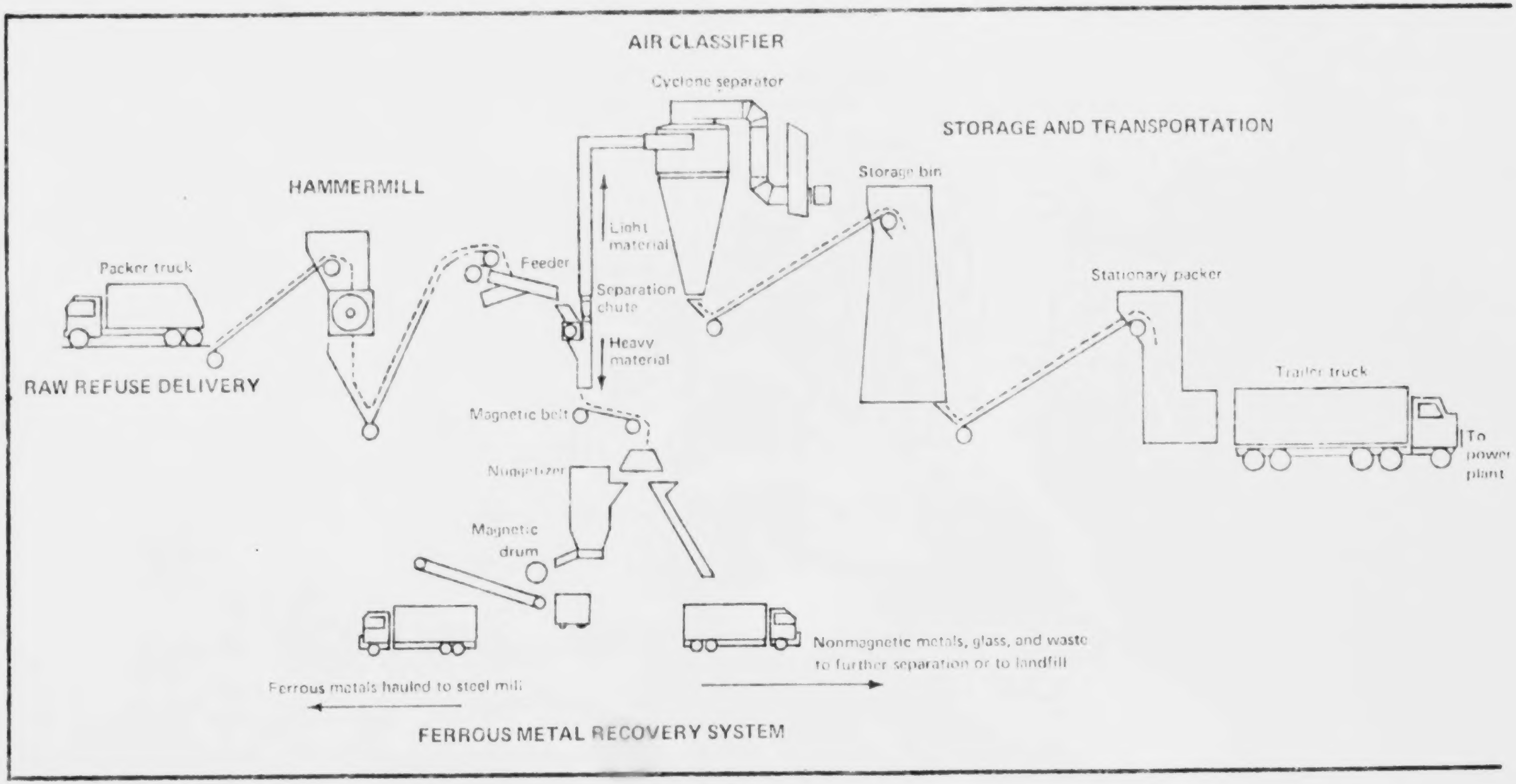

AIR CLASSIFIER
Cyclone separator
STORAGE AND TRANSPORTATION
HAMMERMILL
Storage bin
Light material
Packer truck
Feeder
Separation chute
Stationary packer
Heavy material
RAW REFUSE DELIVERY
Trailer truck
Magnetic belt
To power plant
Nuggetizer
Magnetic drum
Nonmagnetic metals, glass, and waste to further separation or to landfill
Ferrous metals hauled to steel mill
FERROUS METAL RECOVERY SYSTEM

Figure 1. In the system being demonstrated by Union Electric Company in St. Louis, fuel and ferrous metal are recovered from municipal solid waste that has been shredded and air classified.

Although technical problems have been encountered (especially in transporting the material), the project has demonstrated successfully the generation of electricity from burning solid waste as a supplementary fuel in coal-fired power plant boilers, with the simultaneous reduction in solid waste disposal problems.

For more information on the St. Louis project, see Energy Recovery from Waste by Robert A. Lowe (Environmental Protection Publication SW-36dii, U.S. Government Printing Office, 1973, 24 p.).

For information about the first series of air pollution tests conducted as part of the St. Louis project, see St. Louis/Union Electric Refuse Firing Demonstration Air Pollution Test Report by Midwest Research Institute (to be published by the National Technical Information Service, U.S. Department of Commerce).

THE STUDY

The objective of this study is to provide a data base for assessing the potential for using solid waste from residential and commercial sources as supplementary fuel in existing steam-electric power plant boilers that are investor-owned or municipally-owned.

General Scope

The study presents design information about electric utility boilers in selected States and relates the energy requirements of those boilers to waste generation in the surrounding areas for the years 1971 and 1975.

It is generally assumed that a boiler must have both bottom ash handling and air pollution control capabilities if it is to be modified economically to burn solid waste. Accordingly, it was decided to limit the study primarily to those plants designed to burn coal. In certain areas, however, such as Florida and California, where there are large population centers, boilers were included in the study even though they were not designed to burn coal.

The States included in the study are the most heavily populated ones (the Northeast, California, and Florida); they contain about 75 percent of the U.S. population. They include all of the major coal-burning areas and account for over 90 percent of the coal and 80 percent of the oil consumed for power generation.

Boilers Not Included

As mentioned above, this study provides data on investor- and municipally-owned steam-electric boilers. The study does not deal with boilers that generate steam for industrial processes or for heating and cooling buildings (space or district heating and cooling), including those on Federal facilities; also excluded are industrial steam-electric boilers. It should be noted that these other boilers do represent a potential market for solid waste fuel.

At the present time, there is little data available about the location and potential waste-burning capacity of these boilers. The U.S. Environmental Protection Agency is currently conducting two studies to provide these data. First, the Solid and Hazardous Waste Research Laboratory, in Cincinnati, Ohio, is studying the suitability of burning waste as fuel in industrial boilers. Secondly, the Office of Solid Waste Management Programs is surveying Federal facilities to evaluate the feasibility of requiring the Federal government to use waste as fuel.

How the Results Are Presented

Time Frame

The data presented are for two years:

1971, to approximate current conditions, and

1975, to represent a situation in the short-term future, at a time when a number of new plants, particularly nuclear ones, are expected to be in operation and the load factors on the older coal plants may be reduced.

The Areas Covered

For each of the following States, boiler and plant data has been assembled, together with the related statistics on waste generation and transportation distances:

Alabama
California
Connecticut
Delaware (Wilmington only)
Florida
Georgia
Illinois
Indiana
Kansas (Kansas City only)
Kentucky
Maine (Portland only)
Maryland
Massachusetts
Michigan
Minnesota (Minneapolis-St. Paul only)
Missouri
Nebraska (Omaha only)
New Hampshire (Manchester-Portsmouth only)
New Jersey
New York
North Carolina
Ohio
Pennsylvania
Rhode Island
Tennessee
Virginia
West Virginia
Wisconsin

The Data Format for Each State

Data is presented as follows:

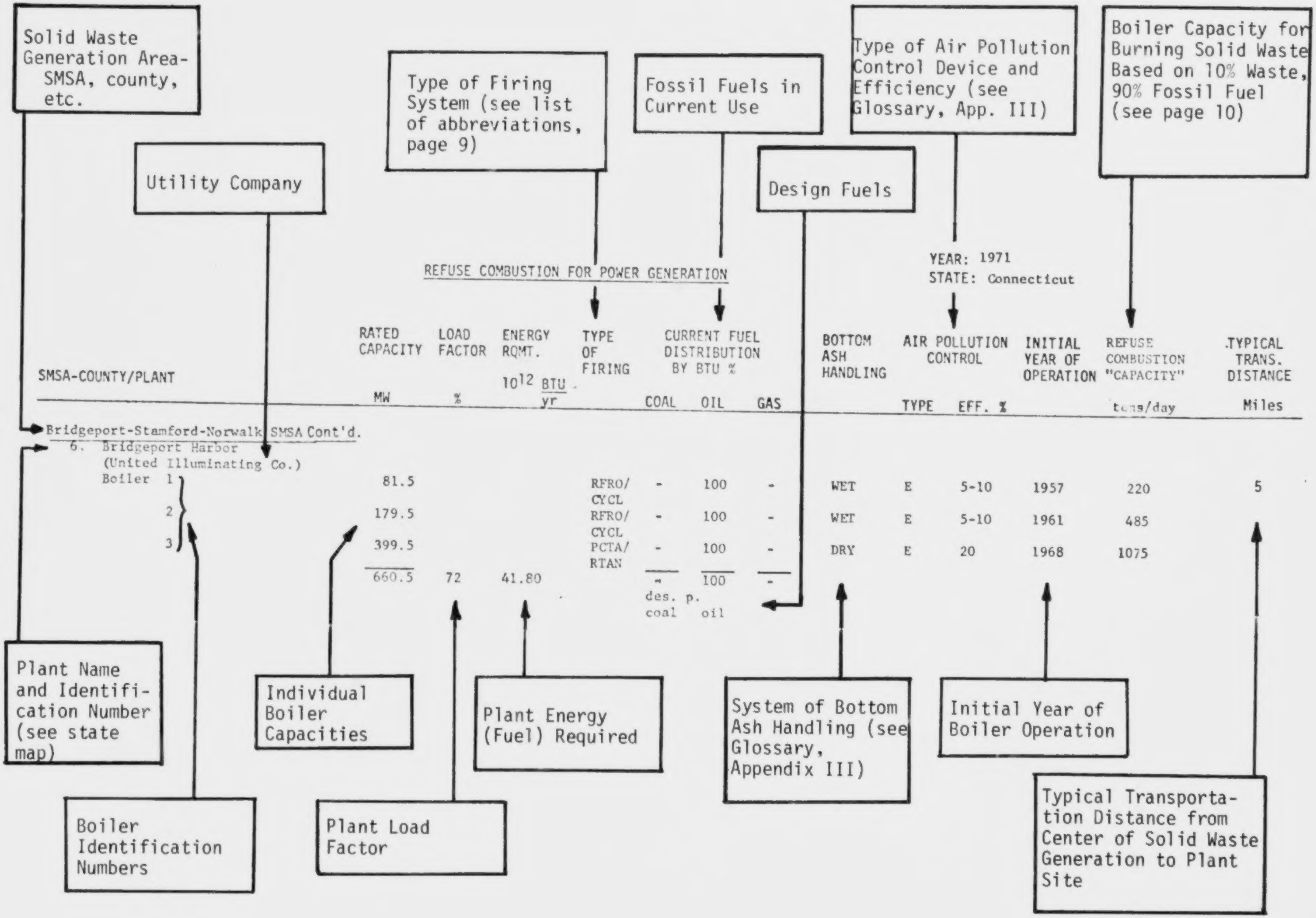
a. A map of the State, showing plants operating in 1971 and those expected to be commissioned by 1975. The corresponding solid waste generation areas are defined.

b. A tabulation by "waste generation areas" of the energy requirements of plants and the potential energy availability from combustion of prepared solid waste. Two tabulations are included, one for all fossil fuel plants and the other for "coal plants" only -- those either designed for coal or converted to burn coal. In each case, the potential energy from solid waste is expressed as a percentage of the area energy requirement for the power plants. Average transportation distances from the centers of waste generation to the plants are shown.

c. Tables of details of individual plants on a boiler-by-boiler basis (where possible). The following items are listed (see also Appendix II, Details of How the Work Was Done):

Waste generation area (SMSA, county, etc.)
Plant name and number according to the State map
Utility company operating the plant
Boiler capacities in megawatts
Plant load factor
Plant energy requirement in Btu per year
Type of firing for each boiler
Plant fuel distribution, by the percentage of Btu from coal, oil, or gas
Plant design fuels
Type of bottom ash handling facilities
Type and efficiency of air pollution control facilities
Year of initial operation of each boiler
Solid waste burning capacity of each boiler
Typical waste transportation distances

A typical table is shown on page 10 with the location of key information marked. Many definitions of terms used in the tables are found in the Glossary, Appendix IV.


Solid Waste Generation Area-SMSA, county, etc.
Utility Company
Type of Firing System (see list of abbreviations, page 9)
Fossil Fuels in Current Use
Design Fuels
Type of Air Pollution Control Device and Efficiency (see Glossary, App. III)
Boiler Capacity for Burning Solid Waste Based on 10% Waste, 90% Fossil Fuel (see page 10)
Plant Name and Identification Number (see state map)
Boiler Identification Numbers
Individual Boiler Capacities
Plant Load Factor
Plant Energy (Fuel) Required
System of Bottom Ash Handling (see Glossary, Appendix III)
Initial Year of Boiler Operation
Typical Transportation Distance from Center of Solid Waste Generation to Plant Site

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: Connecticut

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} BTU/yr	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANS. DISTANCE Miles
Bridgeport-Stamford-Norwalk SMSA Cont'd.													
6. Bridgeport Harbor (United Illuminating Co.)													
Boiler 1	81.5			RFRO/CYCL	-	100	-	WET	E	5-10	1957	220	5
2	179.5			RFRO/CYCL	-	100	-	WET	E	5-10	1961	485	
3	399.5			PCTA/RTAN	-	100	-	DRY	E	20	1968	1075	
	660.5	72	41.80		- des. coal	100 p. oil	-						

Abbreviations

The following abbreviations appear in the plant data tables:

a. The type of firing is specified as follows:

PCFR, pulverized coal: front firing
PCOP, pulverized coal: opposed firing
PCTA, pulverized coal: tangential firing
CYCL, cyclone
SPRE, spreader stoker
OSTO, other stoker
FLUI, fluidized bed
RFRO, residual oil: front firing
ROPP, residual oil: opposed firing
RTAN, residual oil: tangential firing
GFRO, gas: front firing
GOPP, gas: opposed firing
GTAN, gas: tangential firing

b. The type of air pollution control equipment is specified as follows:

E, electrostatic precipitator
C, combination mechanical-electrostatic precipitator
GRAV, gravitational or baffled chamber
SCTA, single cyclone-conventional reverse flow, tangential inlet
SCAX, single cyclone-conventional reverse flow, axial inlet
MCTA, multiple cyclones-conventional reverse flow; tangential inlet
MCAX, multiple cyclones-conventional reverse flow; axial inlet
CYCL, straight-through-flow cyclones
IMPE, impeller collector
VENT, wet collector: venturi
BAGH, fabric collector: baghouse

These abbreviations are consistent with standard Federal Power Commission (FPC) forms.

Efficiency of Air Pollution Control Equipment

The figures shown in the tables refer to average operating data unless marked (t), for data obtained under special test conditions, or (d), for design figures. "NR" indicates data was not reported in the FPC 67 forms nor supplied by the utilities themselves.

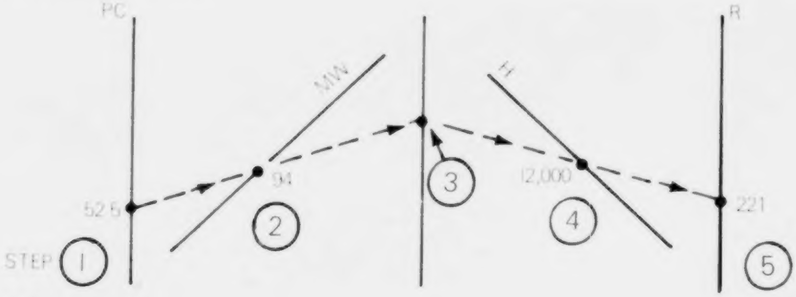
How to Calculate Waste-Burning Capacities

As an aid for rapid calculations concerning boiler capacities and their potential for burning solid waste, a nomograph (Figure 2) was developed.

The nomograph shows the relationship among four variables: (1) the capacity of the boiler, in megawatts (MW). (2) The load factor of the boiler, as a percent of time. (3) The heat rate (or efficiency) of the boiler, in terms of Btu per kilowatt hour (KWH). (4) The tons of solid waste that can be burned in the boiler each working day, assuming that waste-fuel replaces 10 percent of the fossil fuel input and assuming a 5-day work week for waste collection and handling. For any problem, three of the variables must be defined to calculate the fourth. When more than one of the variables are unknown, typical values for some of these can be used to make rough estimates of the remaining unknowns. For example, given only the boiler capacity and load factor to determine the waste burning capacity, one could use a typical plant heat rate of, say, 11,000 or 12,000 Btu/KWH.

An example calculation is given on the nomograph itself:

Q. How much refuse could be burned each day of the week in a 94 MW boiler with a load factor of 52.5 percent and a heat rate of 12,000 Btu/KWH?



A. 221 tons/day

SOLID WASTE COMBUSTION AND GENERATING PLANT PARAMETERS

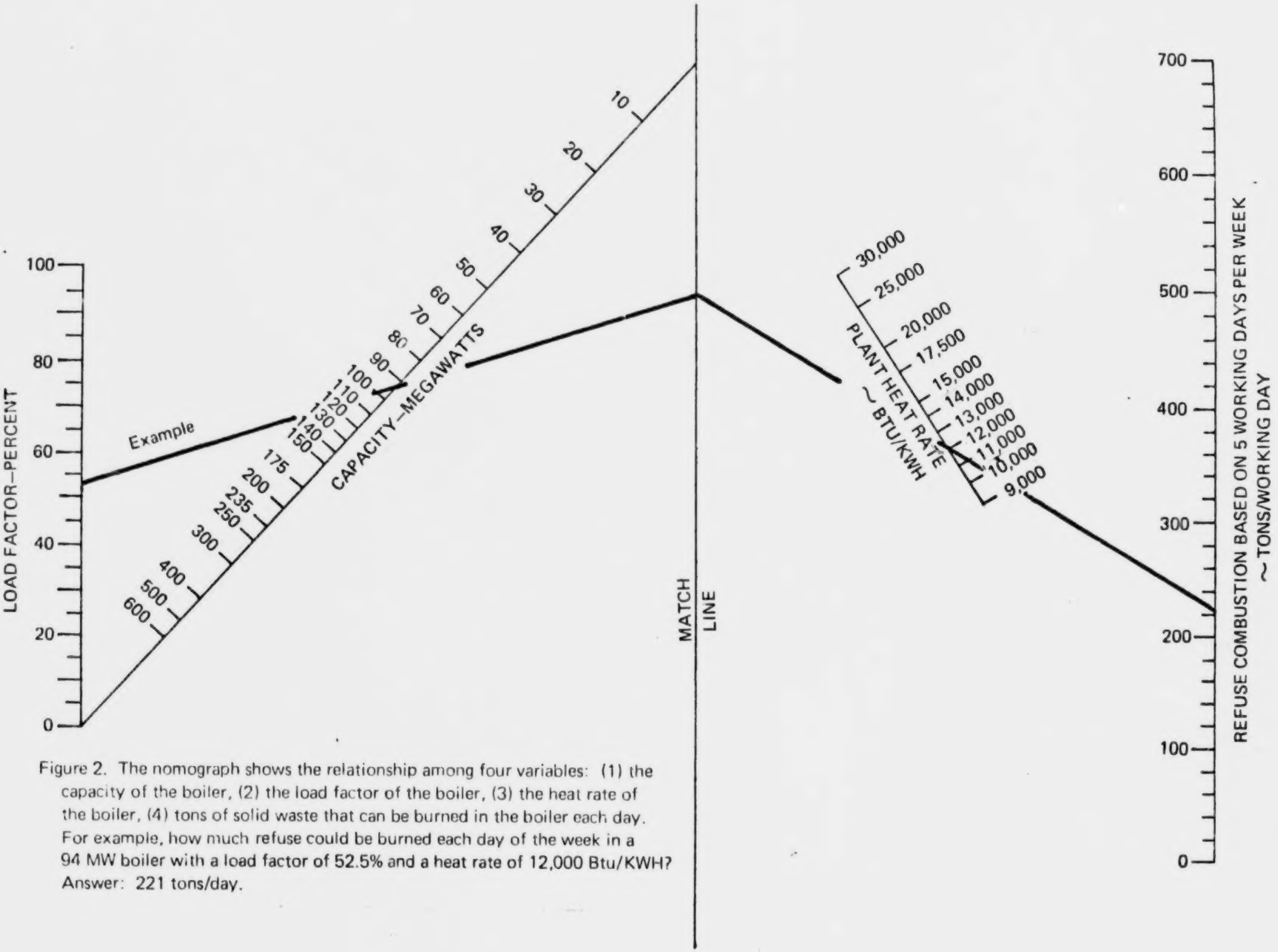
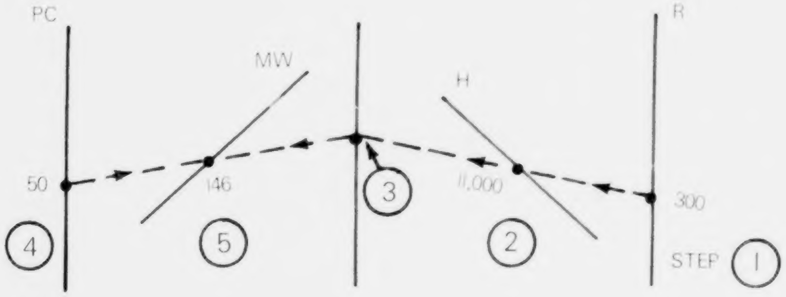


Figure 2. The nomograph shows the relationship among four variables: (1) the capacity of the boiler, (2) the load factor of the boiler, (3) the heat rate of the boiler, (4) tons of solid waste that can be burned in the boiler each day. For example, how much refuse could be burned each day of the week in a 94 MW boiler with a load factor of 52.5% and a heat rate of 12,000 Btu/KWH? Answer: 221 tons/day.

The nomograph was in fact used to calculate the boiler capacities for refuse combustion shown in the data tables in exactly the manner indicated above.

The advantage of a nomograph is its complete flexibility to allow quick calculations to be made for any boiler or plant combinations. In addition, although the calculation would no doubt usually be done to determine the amount of refuse a boiler could burn, given its capacity, load factor and heat rate, the "reverse" calculation may be useful to a municipality. For example, what is the size of generating plant that could be expected to process all the refuse generated in the municipality, given the quantity as 300 tons of refuse per day, a typical plant heat rate of say 11,000 Btu/lb, and a typical load factor of say 50 percent? The answer is 146 MW.



An explanation of how the nomograph was developed is presented in Appendix III.

DATA FOR 1971

Note: Columns may not add exactly due to truncation of numbers.

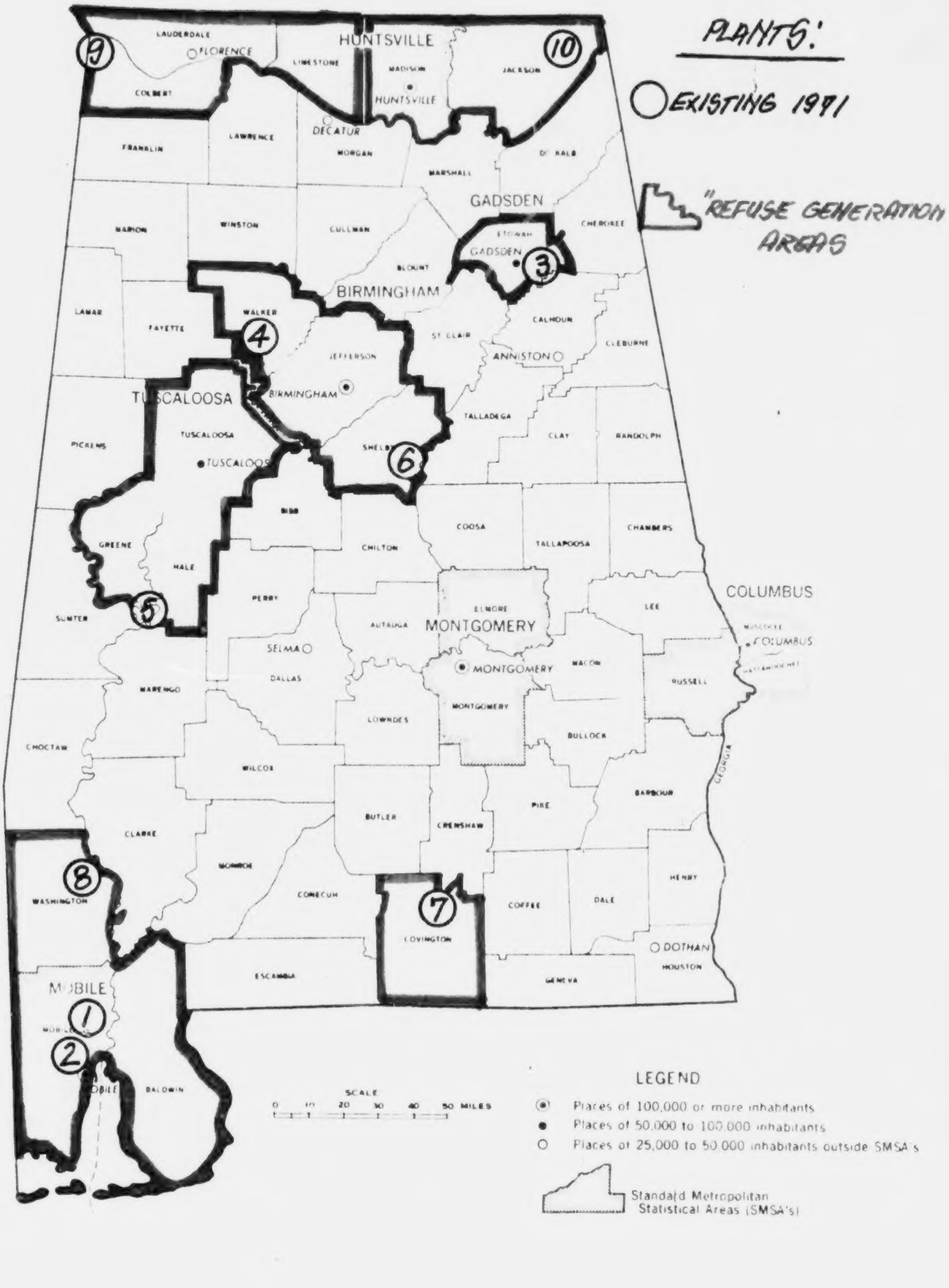
SUMMARY OF RESULTS
REFUSE COMBUSTION FOR POWER GENERATION
ALL FOSSIL FUEL PLANTS 1971

	RATED CAPACITY MW	(b) ENERGY RQMT. 10^{12} $\frac{BTU}{yr}$	AREA POP. Millions	(a) REFUSE GENERATION 10^6 $\frac{tons}{yr}$	10^{12} $\frac{BTU}{yr}$	POTENTIAL ENERGY SUPPLY FROM REFUSE (a/b%)	
ALABAMA	7861.5	376.8	1.743	1.14	10.29	2.7	
CALIFORNIA	19326.6	789.6	15.570	10.20	91.61	11.6	
CONNECTICUT	3036.3	164.8	2.434	1.59	14.39	8.7	
DELAWARE (Wilmington)	827.5	53.5	0.512	0.33	3.03	5.6	
FLORIDA	12323.6	530.8	5.727	3.74	33.41	6.3	
GEORGIA	6507.0	334.0	2.166	1.40	12.63	3.8	
ILLINOIS	12318.3	665.7	8.940	5.83	52.51	7.9	
INDIANA	9269.7	477.6	3.412	2.20	19.90	4.2	
KANSAS (Kansas City)	2395.8	91.3	1.283	0.84	7.60	8.3	(also included in Mo. total)
KENTUCKY	9652.2	481.5	1.342	0.86	7.82	1.6	
MAINE (Portland)	213.6	14.5	0.197	0.12	1.16	8.0	
MARYLAND	5541.3	369.4	5.290	3.47	31.19	8.4	
MASSACHUSETTS	5005.7	269.4	5.920	3.88	34.92	12.9	
MICHIGAN	9322.0	527.9	6.436	4.19	37.82	7.2	
MINNESOTA (Mpls./St.Paul)	2048.8	106.8	1.856	1.21	10.97	10.3	
MISSOURI	9493.7	437.9	4.338	2.84	25.53	5.8	
NEBRASKA (Omaha)	794.2	39.2	0.552	0.36	3.26	8.3	
NEW HAMPSHIRE (Manchester)	638.0	36.3	0.371	0.24	2.19	6.0	
NEW JERSEY	5714.3	289.6	4.501	2.96	26.62	9.2	
NEW YORK	14976.2	710.0	16.424	10.77	96.94	13.6	
NORTH CAROLINA	7464.0	457.8	1.606	1.01	9.15	2.0	
OHIO	21896.9	1080.7	9.332	6.04	554.36	5.0	
PENNSYLVANIA	18661.3	948.5	11.002	7.36	64.78	6.8	
RHODE ISLAND (Providence, Pawtucket, Warwick)	145.9	10.6	0.781	0.51	4.61	43.4	
TENNESSEE	7443.7	340.5	2.010	1.31	12.52	3.7	
VIRGINIA	4174.3	217.7	1.766	1.15	10.36	4.8	
WEST VIRGINIA	5595.4	316.8	0.516	0.32	2.89	0.9	
WISCONSIN	5428.6	248.7	3.269	2.12	19.14	7.7	
TOTALS:	205680.6	10297.6	118.012	77.25	693.55	6.7	

SUMMARY OF RESULTS
REFUSE COMBUSTION FOR POWER GENERATION
COAL-BURNING PLANTS ONLY* 1971

	RATED CAPACITY MW	(b) ENERGY RQMT. $10^{12}\ \frac{\text{BTU}}{\text{yr}}$	AREA POP. Millions	(a) REFUSE GENERATION $10^{6}\ \frac{\text{tons}}{\text{yr}}$	$10^{12}\ \frac{\text{BTU}}{\text{yr}}$	POTENTIAL ENERGY SUPPLY FROM REFUSE (a/b%)	
ALABAMA	7861.5	376.8	1.743	1.14	10.29	2.7	
CALIFORNIA	--	--	--	--	--	--	
CONNECTICUT	3002.0	164.5	2.434	1.59	14.39	8.7	
DELAWARE (Wilmington)	827.5	53.5	0.512	0.33	3.03	5.6	
FLORIDA	4073.7	139.7	5.727	3.74	33.41	23.9	
GEORGIA	6396.0	329.2	2.166	1.40	12.63	3.8	
ILLINOIS	12318.3	665.7	8.940	5.83	52.51	7.9	
INDIANA	9269.7	477.6	3.412	2.20	19.90	4.2	
KANSAS (Kansas City)	2262.8	89.3	1.283	0.84	7.59	8.5	(also included in Mo. total)
KENTUCKY	9652.2	481.5	1.342	0.86	7.82	1.6	
MAINE (Portland)	--	--	--	--	--	--	
MARYLAND	5541.3	369.4	5.290	3.47	31.19	8.4	
MASSACHUSETTS	3533.3	188.2	5.920	3.88	34.92	18.6	
MICHIGAN	9145.5	520.6	6.436	4.19	37.82	7.3	
MINNESOTA (Mpls./St. Paul)	2018.8	106.1	1.856	1.21	10.97	10.3	
MISSOURI	8986.5	421.1	4.338	2.84	25.53	6.1	
NEBRASKA (Omaha)	774.2	38.9	0.552	0.36	3.26	8.4	
NEW HAMPSHIRE (Manchester)	638.0	36.3	0.371	0.24	2.19	6.0	
NEW JERSEY	5194.9	263.8	4.501	2.96	26.62	10.1	
NEW YORK	10134.5	503.9	16.424	10.77	96.94	19.2	
NORTH CAROLINA	7464.0	457.8	1.606	1.01	9.15	2.0	
OHIO	21677.6	973.2	9.332	6.04	54.36	5.6	
PENNSYLVANIA	18335.9	930.3	11.002	7.19	64.78	7.0	
RHODE ISLAND (Providence, Pawtucket, Warwick)	145.9	10.6	0.781	0.51	4.61	43.4	
TENNESSEE	7443.7	340.5	2.010	1.31	12.52	3.7	
VIRGINIA	4174.3	217.7	1.766	1.15	10.36	4.8	
WEST VIRGINIA	5595.4	316.8	0.516	0.32	2.89	0.9	
WISCONSIN	5082.8	237.9	3.269	2.12	19.14	7.7	
TOTALS:	169288.1	8622.7	102.246	66.74	601.27	7.0	

* All plants capable of burning coal (design or converted).



PLANTS:

○ EXISTING 1971

"REFUSE GENERATION AREAS

HUNTSVILLE
GADSDEN
BIRMINGHAM
TUSCALOOSA
MONTGOMERY
COLUMBUS
MOBILE
FLORENCE
DECATUR
HUNTSVILLE
GADSDEN
ANNISTON
BIRMINGHAM
TUSCALOOSA
SELMA
MONTGOMERY
COLUMBUS
DOTHAN
MOBILE
LAUDERDALE
COLBERT
LIMESTONE
MADISON
JACKSON
FRANKLIN
LAWRENCE
MORGAN
MARSHALL
DE KALB
MARION
WINSTON
CULLMAN
ETOWAH
CHEROKEE
BLOUNT
LAMAR
FAYETTE
WALKER
JEFFERSON
ST CLAIR
CALHOUN
CLEBURNE
PICKENS
TUSCALOOSA
SHELBY
TALLADEGA
CLAY
RANDOLPH
GREENE
HALE
BIBB
CHILTON
COOSA
TALLAPOOSA
CHAMBERS
SUMTER
PERRY
AUTAUGA
ELMORE
LEE
MUSCOGEE
CHATTAHOOCHEE
MARENGO
DALLAS
LOWNDES
MONTGOMERY
MACON
RUSSELL
BULLOCK
CHOCTAW
WILCOX
BUTLER
CRENSHAW
PIKE
BARBOUR
CLARKE
MONROE
CONECUH
COFFEE
DALE
HENRY
WASHINGTON
COVINGTON
GEORGIA
ESCAMBIA
GENEVA
HOUSTON
BALDWIN
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③
④
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⑧
⑨
⑩
SCALE
0 10 20 30 40 50 MILES
LEGEND
⊙ Places of 100,000 or more inhabitants
● Places of 50,000 to 100,000 inhabitants
○ Places of 25,000 to 50,000 inhabitants outside SMSA's
Standard Metropolitan Statistical Areas (SMSA's)

REFUSE COMBUSTION FOR POWER GENERATION

Alabama, 1971 - All Fossil Fuel Plants

AREA	RATED CAPACITY MW	(b) ENERGY RQMT. 10^{12} $\frac{BTU}{yr}$	AREA POP. millions	(a) REFUSE GENERATION		POTENTIAL ENERGY SUPPLY FROM REFUSE (a/b %)	TYPICAL TRANS. DISTANCE miles
				10^6 $\frac{tons}{yr}$	10^{12} $\frac{BTU}{yr}$		
Birmingham SMSA	1756.9	115.1	.745	.48	4.41	3.8	28
Gadsden SMSA	138.0	8.5	.096	.06	0.56	6.7	<5
Huntsville SMSA East (Madison County and Jackson County)	1977.9	90.8	.082	.05	0.48	0.5	40
Huntsville SMSA West (Colbert, Lauderdale and Limestone Counties)	1396.6	64.0	.240	.15	1.42	2.2	40
Mobile SMSA (incl. Washington Co.)	1983.6	65.0	.399	.26	2.36	3.6	20
Tuscaloosa SMSA (incl Greene Co. and Hale Co)	568.5	30.6	.146	.09	0.86	2.8	50
Covington County	40.0	2.5	.035	.02	0.18	7.4	5
ALABAMA STATE TOTALS	7861.5	376.8	1.743	1.14	10.29	2.7	

Includes all plants detailed in attached data sheets.

REFUSE COMBUSTION FOR POWER GENERATION
Alabama, 1971 - "Coal Plants" Only

AREA	RATED CAPACITY MW	(b) ENERGY RQMT. $10^{12}\frac{BTU}{yr}$	AREA POP. millions	(a) REFUSE GENERATION		POTENTIAL ENERGY SUPPLY FROM REFUSE (a/b %)	TYPICAL TRANS. DISTANCE miles
				$10^6\frac{tons}{yr}$	$10^{12}\frac{BTU}{yr}$		
Birmingham SMSA	1756.9	115.1	0.745	0.48	4.41	3.8	28
Gadsden SMSA	138.0	8.5	0.096	0.06	0.56	6.7	<5
Huntsville SMSA East (Madison and Jackson Counties)	1977.9	90.8	0.082	0.05	0.48	0.5	40
Huntsville SMSA West (Colbert, Lauderdale and Limestone Counties)	1396.6	64.0	0.240	0.15	1.42	2.2	40
Mobile SMSA (incl. Washington County)	1983.6	65.0	0.399	0.26	2.36	3.6	20
Tuscaloosa SMSA (incl. Greene and Hale Counties)	568.5	30.6	0.146	0.09	0.86	2.8	50
Covington County	40.0	2.5	0.035	0.02	0.18	7.4	5
ALABAMA STATE TOTALS	7861.5	376.8	1.743	1.14	10.29	2.7	

Includes all plants capable* of burning coal (design fuel and/or current fuel). Includes all plants in attached data sheets.

* Does not differentiate between types of firing -- assumes all types capable of refuse burning.

YEAR: 1971
STATE: Alabama

REFUSE COMBUSTION FOR POWER GENERATION

SMSA-COUNTY/PLANT	RATED CAPACITY	LOAD FACTOR	ENERGY RQMT.	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU %			BOTTOM ASH HANDLING	AIR POLLUTION CONTROL		INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY"	TYPICAL TRANS. DISTANCE
	MW	%	10^{12} $\frac{BTU}{yr}$		COAL	OIL	GAS		TYPE	EFF. %		tons/day	miles
Mobile SMSA inc. Washington Co.													
1. Barry													
Alabama Power Company													
Boiler 1	153			PCTA	100	-	-	Dry	MCAX	80	1954	345	20
2	153			PCTA	100	-	-	Dry	MCAX	80	1954	345	
3	272			PCTA	100	-	-	Wet	MCAX	80	1959	615	
4	403.8			PCTA	100	-	-	Wet	E	85	1969	910	
5	788.8			PCTA	100	-	-	Wet	E	95	1971	1780	
	1770.6	59**	51.95		100 des.p.coal	-	-						
2. Chickasaw													
Alabama Power Company													
Boiler 1	46			PCTA/ GTAN				Dry	IMPE	85	1941	120	<5
2	46			PCTA/ GTAN				Dry	IMPE	85	1943	120	
3	46			PCTA/ GTAN				Dry	IMPE	85	1951	120	
	138	51	8.73		34 des.p.coal	-	66 gas						
8. Tombigbee (Alabama Electric Cooperative)	75.0	61	4.34	*	100 des.p. coal	-	-	*	*	*	1969	185	50
AREA TOTAL	1983.6		65.02										

* No FPC-67 filed for boiler breakdowns and air pollution control equipment.
** Based on 1970 factor since boiler 5 started up in 1971.

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: Alabama

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} BTU/yr	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANS. DISTANCE miles
Birmingham SMSA													
4. Gorgas													
Alabama Power Company													
Boiler 4AB	60			PCFR	100	-	-	Dry	-	-	1929	160	25
5	69			PCTA	100	-	-	Dry	-	-	1944	285	
6	125			PCFR	100	-	-	Wet	MCTA	84	1951	315	
7	125			PCFR	100	-	-	Wet	MCTA	84	1952	315	
8	187.5			PCTA	100	-	-	Wet	MCTA	85	1956	485	
9	190.4			PCTA	100	-	-	Wet	MCTA/E	85/95	1958	495	
	756.9	65	47.13		100 des.p.coal	-	-						
6. Gaston													
Southern Electric Generating Co.													
Boiler 1	250			PCOP	100	-	-	Wet	E	88	1960	665	30
2	250			PCOP	100	-	-	Wet	C	83	1960	665	
3	250			PCOP	100	-	-	Wet	E	87	1961	665	
4	250			PCOP	100	-	-	Wet	E	41	1962	665	
	1000	78	68.03		100 des.p.coal	-	-						
AREA TOTAL	1756.9		115.16										
Gadsden SMSA													
3. Gadsden													
Alabama Power Company													
Boiler 1	69			PCTA/ GTAN		-		Dry	E	85	1949	180	∠5
2	69			PCTA/ GTAN		-		Dry	E	75	1949	180	
	138	58	8.54		72 des.p.coal	-	28 gas						
AREA TOTAL	138		8.54										

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: Alabama

SMSA-COUNTY/PLANT	RATED CAPACITY	LOAD FACTOR	ENERGY RQMT.	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU %			BOTTOM ASH HANDLING	AIR POLLUTION CONTROL		INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY"	TYPICAL TRANS. DISTANCE
	MW	%	10^{12} BTU/yr		COAL	OIL	GAS		TYPE	EFF. %		tons/day	miles
Covington County													
7. McWilliams													
Alabama Electric Cooperative													
Boiler 1	7.5			*				*	*	*	1954	20	5
2	7.5										1954	20	
3	25.0										1954	65	Montgomery 60
	40.0	54	2.53		12	-	88						Mobile 94
					des.s.coal		gas						
AREA TOTAL	40.0		2.53										Columbus, Ga. 110
Tuscaloosa SMSA; Greene County													
5. Greene													
Alabama Power Company													
Boiler 1	299.2			PCOP	100	-	-	Wet	E	85	1965	690	50
2	269.3			PCOP	100	-	-	Wet	E	85	1966	620	
	568.5	65	30.68		100	-	-						
					des.p.coal								
AREA TOTAL	568.5		30.68										

* No FPC-67 filed for boiler breakdowns and air pollution control equipment.

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: Alabama

SMSA-COUNTY/PLANT	RATED CAPACITY	LOAD FACTOR	ENERGY RQMT.	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU %			BOTTOM ASH HANDLING	AIR POLLUTION CONTROL		INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY"	TYPICAL TRANSPORTATION DISTANCE MILES
	MW	%	10^{12} $\frac{BTU}{yr}$		COAL	OIL	GAS		TYPE	EFF. %		tons/day	
Huntsville SMSA-West Colbert and Lauderdale County													
9. Colbert A & B Tennessee Valley Authority Colbert A													
Boiler 1	211.65			*	100	-	-	Dry	MCTA/E	NR/NR	1955	430	40
2	211.65			*	100	-	-	Dry	MCTA/E	50/88	1955	430	
3	211.65			*	100	-	-	Dry	MCTA/E	50/97	1955	430	
4	211.65			*	100	-	-	Dry	MCTA/E	50/88	1955	430	
	846.6	55	40.38		100 des.p.coal	-	-						
Colbert B Boiler 5	550			**	100	-	-	Dry	E	50	1965	1010	40
	550	51	23.71		100 des.p.coal	-	-						
AREA TOTAL	1396.6		64.09										

* P. coal circular firing
** P. coal forced draft circular horizontal firing

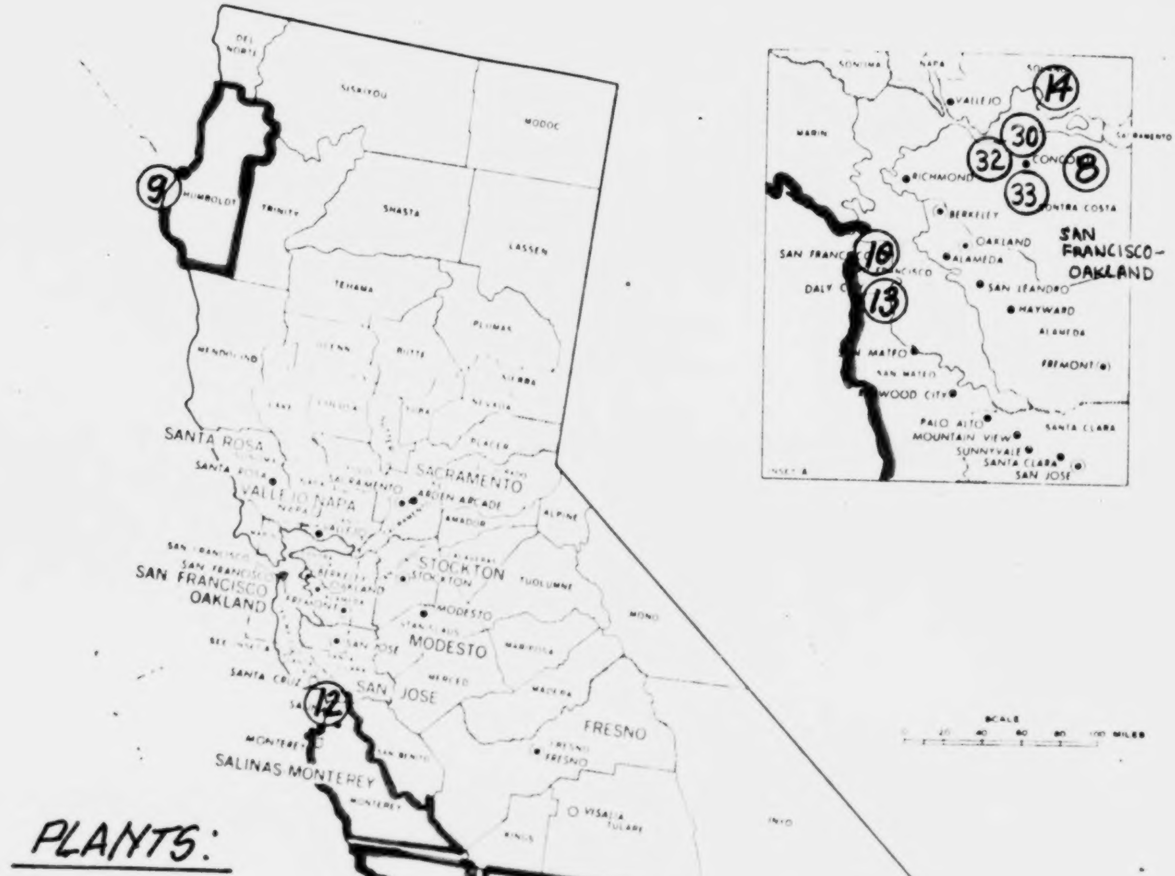
REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: Alabama

SMSA-COUNTY/PLANT	RATED CAPACITY	LOAD FACTOR	ENERGY RQMT.	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU %			BOTTOM ASH HANDLING	AIR POLLUTION CONTROL		INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY"	TYPICAL TRANS. DISTANCE
	MW	%	10^{12} $\frac{BTU}{yr}$		COAL	OIL	GAS		TYPE	EFF. %		tons/day	miles
Huntsville SMSA-East with Jackson County													
10. Widows Creek A & B													
Tennessee Valley Authority													
Widows Creek A													
Boiler 1	140.6			*	100	-	-	Dry	MCTA	60	1952	235	40
2	140.6			*	100	-	-	Dry	MCTA	60	1952	235	
3	149.9			*	100	-	-	Dry	MCTA	60	1952	250	
4	140.6			*	100	-	-	Dry	MCTA	60	1953	235	
5	140.6			*	100	-	-	Dry	MCTA	60	1954	235	
6	140.6			*	100	-	-	Dry	MCTA	60	1954	235	
	852.9	46	37.05		100	-	-						
					des.p.coal								
Widows Creek B													
Boiler 7	575			PCTA	100	-	-	Dry	E	95	1960	115	40
8	550			PCTA	100	-	-	Dry	E	50	1964	115	
	1125.0	57	53.78		100	-	-						
					des.p.coal								
AREA TOTAL	1977.9		90.83										

* P-coal horizontal firing circular burners

CALIFORNIA


PLANTS:
EXISTING 1971
IN OPERATION BY 1975
"REFUSE GENERATION" AREAS
SAN FRANCISCO-OAKLAND
LOS ANGELES-LONG BEACH
ANAHEIM-SANTA ANA-GARDEN GROVE
SANTA ROSA
VALLEJO NAPA
SACRAMENTO
STOCKTON
MODESTO
SAN JOSE
FRESNO
SALINAS MONTEREY
BAKERSFIELD
SAN BERNARDINO RIVERSIDE ONTARIO
OXNARD VENTURA
LOS ANGELES LONG BEACH
ANAHEIM SANTA ANA GARDEN GROVE
SAN DIEGO
SCALE 0 20 40 60 80 100 MILES
LEGEND
Places of 100,000 or more inhabitants
Places of 50,000 to 100,000 inhabitants
Central cities of SMSA's with fewer than 50,000 inhabitants
Places of 25,000 to 50,000 inhabitants outside SMSA's
Standard Metropolitan Statistical Areas (SMSA's)
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California Plants

All existing fossil fuel plants in California are currently burning oil or gas as designed. All proposed plants will also burn oil or gas. The following table is included to indicate the magnitude of the quantities of refuse and associated energy that are available at present.

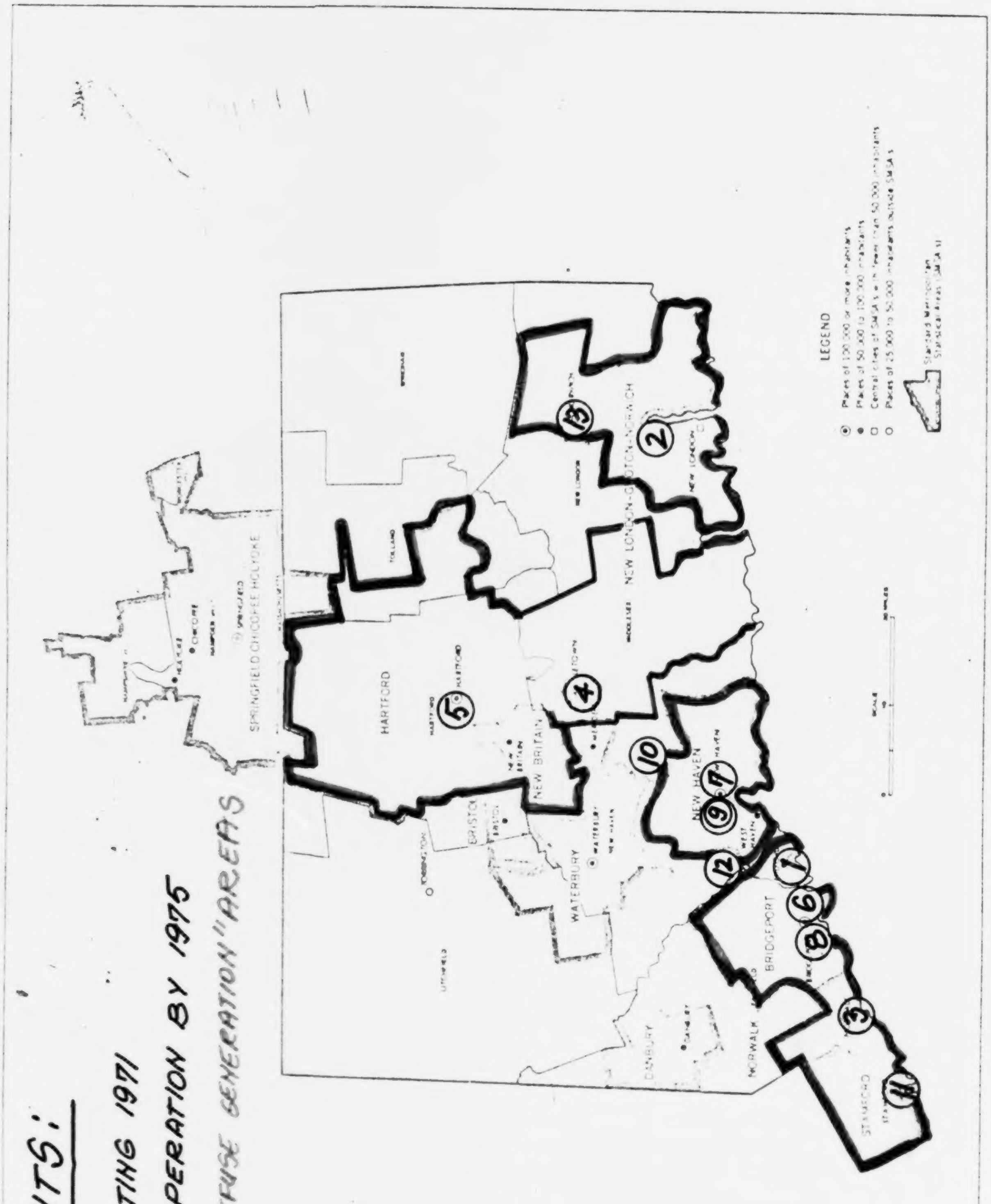
REFUSE COMBUSTION FOR POWER GENERATION
California, 1971 - All Fossil Fuel Plants

AREA	RATED CAPACITY MW	(b) ENERGY RQMT. 10^{12} $\frac{BTU}{yr}$	AREA POP. millions	(a) REFUSE GENERATION 10^6 $\frac{tons}{yr}$	(a) REFUSE GENERATION 10^{12} $\frac{BTU}{yr}$	POTENTIAL ENERGY SUPPLY FROM REFUSE (a/b %)
Anaheim-Santa Ana-Garden Grove SMSA	870.4	43.8	1.452	0.95	8.59	19.6
Bakersfield SMSA	165.5	0.0	0.330	0.21	1.95	9750.0
Los Angeles-Long Beach SMSA	8327.6	339.5	7.196	4.72	42.55	12.5
Oxnard-Simi Valley-Ventura SMSA	435.2	26.5	0.387	0.25	2.03	7.6
Salinas-Monterey SMSA	2174.7	80.7	0.257	0.16	1.52	1.9
San Bernardino-Riverside-Ontario SMSA	1188.5	64.0	1.170	0.76	6.92	10.8
San Diego SMSA	1576.8	65.9	1.380	0.90	8.16	12.4
San Francisco-Oakland SMSA	3429.2	126.0	3.174	2.08	18.77	14.9
San Luis Obispo County	1056.3	39.9	0.108	0.06	0.57	1.4
Humboldt County	102.4	2.9	0.102	0.06	0.54	18.3
CALIFORNIA STATE TOTALS	19326.6	789.6	15.570	10.20	91.61	11.6

NOTES

Typical Transportation Distances: All plants located within SMSA regions except
11. Morro Bay, San Luis Obispo County Santa Barbara 85 miles
9. Humboldt Bay, Humboldt County Sacramento, San Francisco 200 miles

Energy Requirement calculations based on data derived from: 1) Steam-Electric Plant Capacity, Net Generation, Fuel Consumption and Unit Costs, 1971, and 2) Steam-Electric Plant Air and Water Quality Control Data, Federal Power Commission, 1970.


PLANTS:
○ EXISTING 1971
◎ IN OPERATION BY 1975
"REFUSE GENERATION" AREAS
SPRINGFIELD-CHICOPEE-HOLYOKE
HARTFORD
NEW BRITAIN
BRISTOL
WATERBURY
NEW HAVEN
WEST HAVEN
BRIDGEPORT
NORWALK
STAMFORD
DANBURY
TOLLAND
NEW LONDON-GROTON-NORWICH
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LEGEND
Places of 100,000 or more inhabitants
Places of 50,000 to 100,000 inhabitants
Central cities of SMSA's with fewer than 50,000 inhabitants
Places of 25,000 to 50,000 inhabitants outside SMSA's
Standard Metropolitan Statistical Areas (SMSA's)
SCALE

REFUSE COMBUSION FOR POWER GENERATION

Connecticut, 1971 - All Fossil Fuel Plants

AREA	RATED CAPACITY MW	(b) ENERGY RQMT. 10^{12} $\frac{BTU}{yr}$	AREA POP. millions	(a) REFUSE GENERATION		POTENTIAL ENERGY SUPPLY FROM REFUSE (a/b%)	TYPICAL TRANS. DISTANCE Miles
				10^6 $\frac{tons}{yr}$	10^{12} $\frac{BTU}{yr}$		
Bridgeport-Norwalk-Stamford SMSA	1668.9	97.0	0.807	0.53	4.77	4.9	6
Hartford-New Britain SMSA (incl. Middlesex Co.)	638.8	37.4	0.957	0.62	5.66	15.1	<5
New Haven SMSA	168.8	6.8	0.435	0.28	2.57	37.7	<5
New London-Groton-Norwich SMSA	559.8	23.5	0.235	0.15	1.39	5.9	<5
CONNECTICUT STATE TOTALS	3036.3	164.8	2.434	1.59	14.39	8.7	

Includes all plants detailed on attached data sheets.

REFUSE COMBUSTION FOR POWER GENERATION

Connecticut, 1971 - "Coal Plants" Only

AREA	RATED CAPACITY MW	(b) ENERGY RQMT. $10^{12}\frac{BTU}{yr}$	AREA POP. millions	(a) REFUSE GENERATION $10^6\frac{tons}{yr}$	$10^{12}\frac{BTU}{yr}$	POTENTIAL ENERGY SUPPLY FROM REFUSE (a/b %)	TYPICAL TRANS. DISTANCE Miles
Bridgeport-Norwalk-Stamford SMSA	1648.9	96.8	0.807	0.53	4.7	4.9	6
Hartford-New Britain SMSA (incl. Middlesex Co.)	638.8	37.4	0.957	0.62	5.6	15.1	<5
New Haven SMSA	168.8	6.8	0.435	0.28	2.5	37.7	<5
New London-Groton-Norwich SMSA	545.5	23.4	0.235	0.15	1.3	5.9	<5
CONNECTICUT STATE TOTALS	3002.0	164.5	2.434	1.59	14.3	8.7	

Includes all plants capable* of burning coal (design fuel and/or current fuel). Includes all plants in attached data sheets except Nos. 12 and 13.

* Does not differentiate between types of firing -- assumes all types capable of refuse burning.

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: Connecticut

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} BTU/yr	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANS. DISTANCE Miles
Bridgeport-Stamford-Norwalk SMSA													
8. Steel Point (United Illuminating Co.)					des	p-coal/oil							
Boiler 1	All boilers in range 5 to 36 MW			RFRO	-	100	-	None	None	-	1923	485	5
2				RFRO	-	100	-	"	"	-	1923		
3				RFRO	-	100	-	"	"	-	1923		
4				RFRO	-	100	-	"	"	-	1923		
5				RFRO	-	100	-	"	"	-	1923		
6				RFRO	-	100	-	"	"	-	1923		
13				RFRO	-	100	-	"	"	-	1923		
14				RFRO	-	100	-	"	"	-	1923		
15				RFRO	-	100	-	"	"	-	1923		
16				RFRO	-	100	-	"	"	-	1923		
17				RFRO	-	100	-	"	"	-	1923		
18				RFRO	-	100	-	"	"	-	1923		
7				RFRO	-	100	-	"	"	-	1926		
8				RFRO	-	100	-	"	"	-	1926		
9				RFRO	-	100	-	"	"	-	1926		
10				RFRO	-	100	-	"	"	-	1926		
19				RFRO	-	100	-	"	"	-	1927		
20				RFRO	-	100	-	"	"	-	1927		
21				RFRO	-	100	-	"	"	-	1927		
22				RFRO	-	100	-	"	"	-	1927		
11				PCFR/ RFRO	-	100	-	DRY	E	5-10 *	1937		
12				PCFR/ RFRO	-	100	-	DRY	E	5-10	1937		
23				PCFR/ RFRO	-	100	-	DRY	E	5-10	1941		
24				PCFR/ RFRO	-	100	-	DRY	E	5-10	1941		
25				PCFR/ RFRO	-	100	-	DRY	E	5-10	1943		
27				PCFR/ RFRO	-	100	-	DRY	E	5-10	1943		
26				TOP FIRED	-	100	-	DRY	E	60	1950		
	155.5	46	11.55		-	100	-						

* Approximate efficiency on "oil operation", (non-energised) When energised, efficiencies around 75% reported.

YEAR: 1971
STATE: Connecticut

REFUSE COMBUSTION FOR POWER GENERATION

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} $\frac{BTU}{yr}$	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANS. DISTANCE Miles
Bridgeport-Stamford-Norwalk SMSA Cont'd.													
6. Bridgeport Harbor (United Illuminating Co.)													
Boiler 1	81.5			RFRO/ CYCL	-	100	-	WET	E	5-10	1957	220	5
2	179.5			RFRO/ CYCL	-	100	-	WET	E	5-10	1961	485	
3	399.5			PCTA/ RTAN	-	100	-	DRY	E	20	1968	1075	
	660.5	72	41.80		- des. p. coal	100 oil	-						
12. Derby (United Illuminating Co.)	20	8	0.168	*	- des.	100 oil	-	*	*	*		5	15
11. Stamford (Hartford Electric Co.)													10
Boiler 9	All boilers under 25 MW			PCFR/ RFRO				DRY	E	90	1927		
10				PCFR/ RFRO				DRY	E	90	1927		
11				TOP FIRED				DRY	C	95	1941		
12				RFRO/ GFRO				NR	None	-	1948		
13				RFRO/ GFRO				NR	None	-	1948		
	52.5	31	2.59		3 des.p. coal	95 oil	2 gas					109	

* No FPC-67 filed.

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: Connecticut

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} $\frac{BTU}{yr}$	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANS. DISTANCE Miles
Bridgeport-Stamford-Norwalk SMSA Cont'd.													
3. Norwalk Harbor (Conn. Light and Power)													
Boiler 1	163.2			PCTA				DRY	C	98	1960	355	10
2	163.2			PCTA				DRY	C	98.5	1963	355	
	326.4	58	16.82		93 des. p. coal	7	-						
1. Devon (Conn. Light and Power)													
Boiler 3	*			RFRO				DRY	E	96	1951		5
4a				PCFR/ RFRO				DRY	C	94	1942		
4b				PCFR/ RFRO				DRY	C	94	1942		
5a				RFRO/ PCFR				DRY	C	93	1947		
5b				RFRO/ PCFR				DRY	C	93	1947		
6				RFRO				DRY	E	95	1947		
7	103.5			PCTA				DRY	E	98	1956	235	
8	103.5			PCTA				DRY	E	98	1958	235	
9				PCTA				DRY	E	98	1958		
	454	52	24.07		46 des. p. coal oil	54	-						
AREA TOTAL	1668.9		96.83										

* All boilers except 7, 8 under 70 MW

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: Connecticut

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} BTU/yr	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANS. DISTANCE Miles
Hartford-New Britain SMSA & Middlesex Co.													
5. South Meadow Hartford Electric Light Co.													
Boiler 5	40			RFRO	-	100	-	Dry	None	-	1929	95	5
6	40			RFRO	-	100	-	Dry	SCAX	35	1938	95	
7	45			RFRO	-	100	-	Dry	SCAX	35	1942	105	
8	51.8			Top Fired	-	100	-	Dry	SCAX	35	1950	120	
9	20			RFRO	-	100	-	Dry	None	-	1960	45	
10	20			RFRO	-	100	-	Dry	None	-	1960	45	
	216.8	45	12.20		- des.p.coal oil	100	-						
4. Middletown Hartford Electric Light Co.													
Boiler 1	69			PCFR				Wet	C	67	1954	175	
2	113.6			PCFR				Wet	C	67	1958	285	
3	239.4			*				Wet	E	67	1964	610	
	422	69	25.29		12 des.p.coal/oil	88	-						
AREA TOTAL	638.8		37.49										

*opposed cyclones, not pulverized

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: Connecticut

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} $\frac{BTU}{yr}$	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANSPORT DISTANCE MILES
New London-Groton-Norwich SMSA													
2. Montville**													
(Conn. Light and Power Co.)													
Boiler 1	31.25			RFRO				DRY	E	94(t)	1948	55	<5
2	31.25			RFRO				DRY	E	94(t)	1948	55	
4(a&b)	25			RFRO				DRY	SCTA	NR	1937	45	
5	75			RTAN				DRY	E	99.4(t)	1954	135	
6	383			RTAN				DRY	NR	NR	1971	705	
	545.5	40	23.43		17	83	-						
					des.s.p.coal								
13. Greenville	14.3	6	0.09	*	-	100	-	*	*	*		-	<5
(Norwich Dept. Public Utilities)					des. oil gas								
AREA TOTAL	559.8		23.52										

** Boiler No. 3 Retired in 1971 . * No FPC-67 filed.

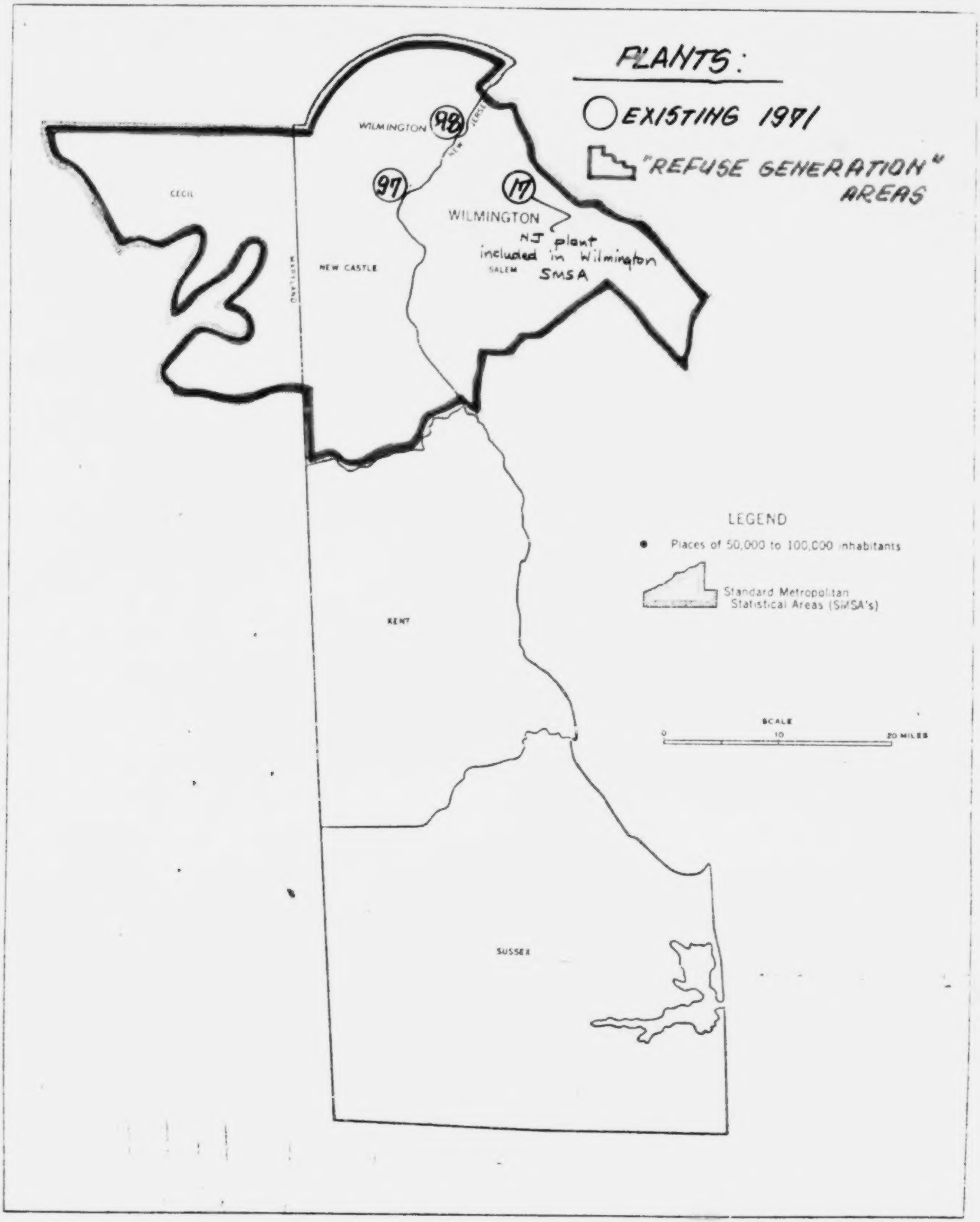
REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: Connecticut

SMSA-COUNTY/PLANT	RATED CAPACITY	LOAD FACTOR	ENERGY RQMT.	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU %			BOTTOM ASH HANDLING	AIR POLLUTION CONTROL		INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY"	TYPICAL TRANS. DISTANCE
	MW	%	10^{12} $\frac{BTU}{yr}$		COAL	OIL	GAS		TYPE	EFF. %		tons/day	Miles
New Haven SMSA													
7. English (United Illuminating Co.)													
Boiler 1	6.25			RFRO	-	100	-	none	none	-	1929	10	<5
2	6.25			RFRO	-	100	-	"	"	-	1929	10	
3	6.25			RFRO	-	100	-	"	"	-	1929	10	
4	6.25			RFRO	-	100	-	"	"	-	1929	10	
5	6.25			RFRO	-	100	-	"	"	-	1929	10	
6	6.25			RFRO	-	100	-	"	"	-	1929	10	
7	6.25			RFRO	-	100	-	"	"	-	1937	10	
9	6.25			RFRO	-	100	-	"	"	-	1939	10	
11	6.25			RFRO	-	100	-	"	"	-	1941	10	
8	6.25			RFRO	-	100	-	"	"	-	1930	10	
10	6.25			RFRO	-	100	-	"	"	-	1930	10	
12	6.25			RFRO	-	100	-	"	"	-	1930	10	
13	34.5			TOP FIRED	-	100	-	DRY	E	47	1948	65	
14	36.75			TOP FIRED	-	100	-	DRY	E	47	1953	70	
	146.3	30	6.54		- des.p.	100 coal oil	-						
10. Pierce (Wallingford Dept. Public Util.)	22.5	10	0.28	*	100 des s.	- coal	-	*	*	*		10	<5
AREA TOTAL	168.8		6.82										

* No FPC-67 filed.

DELAWARE


PLANTS:
EXISTING 1971
"REFUSE GENERATION" AREAS
WILMINGTON
98
97
17
NEW JERSEY
CECIL
MARYLAND
NEW CASTLE
WILMINGTON
NJ plant included in Wilmington SMSA
SALEM
LEGEND
Places of 50,000 to 100,000 inhabitants
Standard Metropolitan Statistical Areas (SMSA's)
KENT
SCALE
0
10
20 MILES
SUSSEX

REFUSE COMBUSTION FOR POWER GENERATION
Delaware, 1971 - All Fossil Fuel Plants ,Wilmington SMSA

AREA	RATED CAPACITY MW	(b) ENERGY RQMT. $10^{12}\ \frac{BTU}{yr}$	AREA POP. millions	(a) REFUSE GENERATION $10^{6}\ \frac{tons}{yr}$	$10^{12}\ \frac{BTU}{yr}$	POTENTIAL ENERGY SUPPLY FROM REFUSE (a/b %)	TYPICAL TRANS. DISTANCE Miles
Wilmington SMSA	827.5	53.5	0.512	0.33	3.03	5.6	<5

Includes all plants detailed in attached data sheets.

REFUSE COMBUSTION FOR POWER GENERATION
Delaware, 1971 - "Coal Plants" Only ,Wilmington SMSA

AREA	RATED CAPACITY MW	(b) ENERGY RQMT. $10^{12}\frac{BTU}{yr}$	AREA POP. millions	(a) REFUSE GENERATION $10^{6}\frac{tons}{yr}$	$10^{12}\frac{BTU}{yr}$	POTENTIAL ENERGY SUPPLY FROM REFUSE (a/b %)	TYPICAL TRANS. DISTANCE Miles
Wilmington SMSA	827.5	53.5	0.512	0.33	3.03	5.6	<5

Includes all plants capable* of burning coal (design fuel and/or current fuel). Includes all plants in attached data sheets.

* Does not differentiate between types of firing -- assumes all types capable of refuse burning.

YEAR: 1971
STATE: Delaware

REFUSE COMBUSTION FOR POWER GENERATION

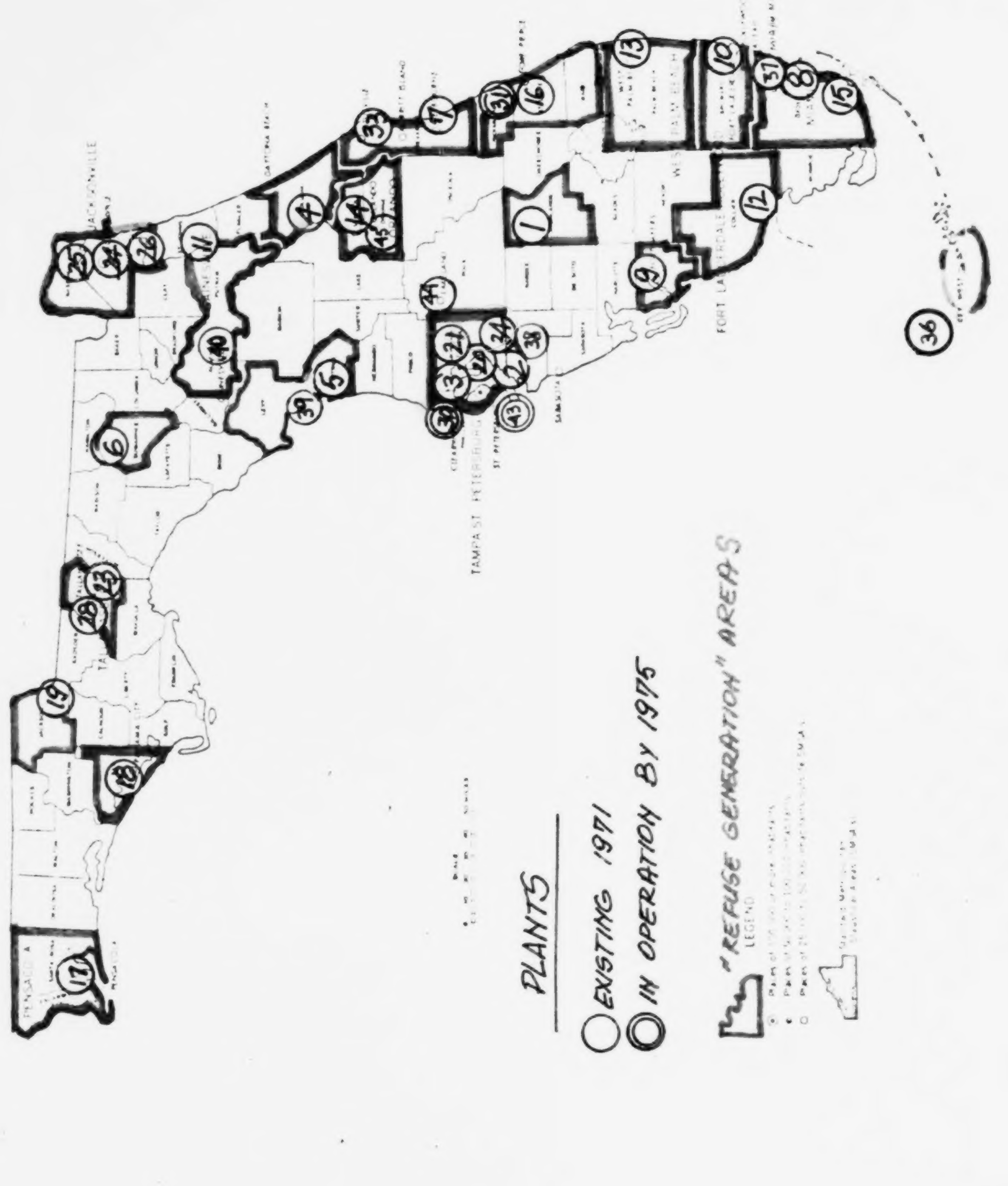
SMSA-COUNTY/PLANT	RATED CAPACITY	LOAD FACTOR	ENERGY RQMT.	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU %			BOTTOM ASH HANDLING	AIR POLLUTION CONTROL		INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY"	TYPICAL TRANS. DISTANCE
	MW	%	$10^{12}\ \frac{BTU}{yr}$		COAL	OIL	GAS		TYPE	EFF. %		tons/day	Miles
Wilmington SMSA													
98. Edgemoor Delaware Power & Light													<5
Boiler 1 *	72			PCTA				Dry	MCTA	72	1951	225	
2	72			PCTA				Dry	MCTA	72	1951	225	
3	82			PCTA				Dry	MCAX	83	1954	280	
4	164			PCTA				Dry	E	95	1966	555	
	390	65	30.90		60	32	8						
					des: p.coal	oil	gas						
97. Delaware City Delaware Power & Light													
Boiler 1	55			PCOP ROPP GOPP				Wet	MCTA	NR	1956	80	<5
2	55			PCOP ROPP GOPP				Wet	MCTA	NR	1956	80	
3	55			PCOP ROPP GOPP				Wet	MCTA	NR	1956	80	
4	75			PCOP ROPP GOPP				Wet	MCTA/E	NR/ 97.5 (d)	1961	105	
	129.4	30	4.45		-	54	46						
					des: p.coal	oil	gas						

* Reported Boiler capacities prorated to give total plant capacity.

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: Delaware

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} BTU/yr	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANS. DISTANCE Miles
Wilmington SMSA													
17(NJ). Deepwater													
Atlantic City Electric Company													
Boiler 1	All boilers in range 23 to 82 MW			CYCL				Wet	E	90.7(t)	1958		<5
8				PCFR				Dry	MCAX	64.5(t)	1954		
				RFRO									
				GRRO									
7				top-fired				Dry	MCAX	84.1(t)	1942		
9				RFRO				Dry	MCTA	80.8(t)	1952		
				PCFR									
3				RFRO				Wet	MCAX	83.4(d)	1930		
5				RFRO				Wet	MCAX	83.4(t)	1930		
4				RFRO				Wet	MCAX	83.4(d)	1930		
6				RFRO				Wet	MCAX	83.4(d)	1930		
	308.3	56	18.17		0	83	17					770	
					des. p. coal	oil	gas						
AREA TOTAL	827.5		53.52										


PLANTS
EXISTING 1971
IN OPERATION BY 1975
"REFUSE GENERATION" AREAS
LEGEND
PENSACOLA
JACKSONVILLE
DAYTONA BEACH
WEST PALM BEACH
FORT LAUDERDALE
TAMPA ST. PETERSBURG
ST. PETERSBURG
KEY WEST
1
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
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19
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47

REFUSE COMBUSTION FOR POWER GENERATION
Florida, 1971 - All Fossil Fuel Plants

AREA	RATED CAPACITY MW	(b) ENERGY RQMT. 10^{12} $\frac{BTU}{yr}$	AREA POP. millions	(a) REFUSE GENERATION 10^6 $\frac{tons}{yr}$	10^{12} $\frac{BTU}{yr}$	POTENTIAL ENERGY SUPPLY FROM REFUSE (a/b%)	TYPICAL TRANS. DISTANCE Miles
Daytona Beach SMSA	201.6	12.5	0.176	0.11	1.04	8.3	5
Fort Lauderdale SMSA	312.5	15.6	0.634	0.41	3.75	23.9	< 5
Fort Myers SMSA	558.3	22.8	0.108	0.07	0.64	2.8	< 5
Gainesville SMSA (incl. Putnam Co.)	208.5	11.6	0.145	0.09	0.80	6.9	10
Jacksonville SMSA (incl. Nassau Co.)	903.7	41.5	0.564	0.37	3.33	8.0	5
Melbourne-Titusville-Cocoa SMSA	1062.5	53.8	0.241	0.15	1.43	2.7	7
Miami SMSA	1196.9	57.0	1.302	0.85	7.70	13.5	24
Orlando SMSA	252.3	12.0	0.437	0.28	2.58	21.5	15
Pensacola SMSA	651.3	34.5	0.246	0.16	1.45	4.2	< 5
Tallahassee SMSA	193.0	11.7	0.106	0.07	0.63	5.0	< 5
Tampa-St.Petersburg SMSA	2851.8	61.9	1.040	0.68	6.15	9.9	10
West Palm Beach SMSA	729.6	36.5	0.355	0.23	2.10	5.7	5
Bay County	340.0	17.8	0.077	0.04	0.41	5.3	< 5
Citrus County-Levy County	1018.1	43.2	0.033	0.02	0.19	0.5	5
Collier County	1254.6	73.8	0.038	0.02	0.02	-	30
Highlands County	61.0	2.7	0.030	0.01	0.16	5.9	10
Indian River Co.-St. Lucie Co.-Martin Co.	71.6	2.6	0.116	0.06	0.62	23.8	7
Jackson County	98.0	5.3	0.035	0.02	0.19	3.5	10
Suwannee County	147.0	9.4	0.016	0.00	0.09	1.0	< 5
Key West	68.8	3.9	0.028	0.01	0.17	4.3	
FLORIDA STATE TOTALS	12323.65	530.8	5.727	3.74	33.41	6.3	

Includes all plants detailed on attached data sheets.

REFUSE COMBUSTION FOR POWER GENERATION

Florida, 1971 - "Coal Plants" Only

AREA	RATED CAPACITY MW	(b) ENERGY RQMT. 10^{12} $\frac{BTU}{yr}$	AREA POP. millions	(a) REFUSE GENERATION 10^6 $\frac{tons}{yr}$	(a) REFUSE GENERATION 10^{12} $\frac{BTU}{yr}$	POTENTIAL ENERGY SUPPLY FROM REFUSE (a/b%)	TYPICAL TRANS. DISTANCE Miles
Daytona Beach SMSA	-	-	0.176	0.11	1.04	-	-
Fort Lauderdale SMSA	-	-	0.634	0.41	3.75	-	-
Fort Myers SMSA	-	-	0.108	0.07	0.64	-	-
Gainesville SMSA (incl.Putnam Co.)	-	-	0.145	0.09	.86	-	-
Jacksonville SMSA (incl.Nassau Co.)	-	-	0.564	.37	3.33	-	-
Melbourne-Titusville-Cocoa SMSA	-	-	0.241	.15	1.43	-	-
Miami SMSA	-	-	1.302	.85	7.70	-	-
Orlando SMSA	-	-	0.437	.28	2.58	-	-
Pensacola SMSA	651.3	34.5	0.246	.16	1.45	4.2	5
Tallahassee SMSA	-	-	0.106	.07	0.63	-	-
Tampa-St.Petersburg SMSA	1948.5	38.5	1.040	.68	6.15	16.0	10
West Palm Beach SMSA	-	-	0.355	.23	2.10	-	-
Bay County	340.0	17.8	0.077	.04	0.41	2.3	5
Citrus County-Levy County	964.3	40.9	0.020	.01	0.11	0.3	5
Collier County	-	-	0.038	.02	0.02	-	-
Highlands County	-	-	0.030	.01	0.16	-	-
Indian River Co.-St.Lucie Co.-Martin Co.	71.6	2.6	0.116	.06	0.62	23.8	7
Jackson County	98.0	5.3	0.035	.02	0.19	3.5	10
Suwannee County	-	-	0.016	.00	0.09	-	-
Key West	-	-	0.028	.01	0.17	-	-
FLORIDA STATE TOTALS	4073.7	139.7	5.727	3.74	33.41	23.9	

Includes all plants capable* of burning coal (design fuel and/or current fuel). Includes plants 5, 16, 17, 18, 19, 20, 21 and 32.

* Does not differentiate between types of firing--assumes all types capable of refuse burning.

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: Florida

SMSA-COUNTY/PLANT	RATED CAPACITY	LOAD FACTOR	ENERGY RQMT.	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU %			BOTTOM ASH HANDLING	AIR POLLUTION CONTROL		INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY"	TYPICAL TRANS. DISTANCE
	MW	%	10^{12} BTU/yr		COAL	OIL	GAS		TYPE	EFF. %		tons/day	Miles
Tampa-St. Petersburg SMSA													
2. Bartow													
Florida Power Corporation													
Boiler 1	127.5			RFRO				None	none	-	1958	30	10
2	127.5			RTAN				"	"	-	1961	30	
3	239.4			RTAN				"	"	-	1963	60	
	494.4	7	2.94		-	89	11						
					des.	oil	gas						
3. Higgins													
Florida Power Corporation													
Boiler 1	46			GFRO				None	none	-	1951	120	10
2	46			GFRO				"	"	-	1953	120	
3	46			GTAN				"	"	-	1954	120	
	138	59	8.61		-	72	28						
					des.	oil	gas						
20. Gannon													
Tampa Electric													
Boiler 1	130			CYCL	100	-	-	Wet	E	86	1957	220	10
2	130			CYCL	100	-	-	Wet	E	91	1958	220	
3	179.5			CYCL	100	-	-	Wet	E	85	1960	305	
4	187.5			CYCL	100	-	-	Wet	E	80	1964	315	
5	239.4			PCOP	100	-	-	Wet	E	98	1965	405	
6	414			PCOP	100	-	-	Wet	E	86	1967	700	
	1270.4	43	9.47		100	-	-						
					des.p.coal								

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: FLORIDA

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} BTU/yr	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANS. DISTANCE Miles
Tampa-St. Petersburg SMSA cont'd													
44. Lake Parker (Larsen Memorial, Polk Co.)													
Plant 1 retired 1971													
Plant 2													< 5
Boiler 9	20			RFRO/ GFRO				None	None	-	1950	40	
10	25			RFRO/ GFRO				"	"	-	1956	55	
11	25			RFRO/ GFRO				"	"	-	1959	55	
12	50			RFRO/ GFRO				"	"	-	1966	110	
	120	49	6.23		-	51 des.oil/gas	49						
Plant 3													< 5
Boiler 1	100			ROPP/ GOPP									
	100	25	2.60		-	86 des.oil/gas	14	None	None	-	1970	110	
Plant Totals	219.6		8.83										
38. Bayboro													
Florida Power Corp.													15
Boiler 4	12.5			RFRO				None	None	-	1941	30	
5	10			RFRO				None	None	-	1941	25	
6	28.8			RFRO				None	None	-	1949	70	
	51.3	47	3.06		-	100 des.oil	-						

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: Florida

SMSA-COUNTY/PLANT	RATED CAPACITY	LOAD FACTOR	ENERGY RQMT.	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU %			BOTTOM ASH HANDLING	AIR POLLUTION CONTROL		INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY"	TYPICAL TRANS. DISTANCE
	MW	%	$10^{12}\ \frac{BTU}{yr}$		COAL	OIL	GAS		TYPE	EFF. %		tons/day	Miles
Tampa-St. Petersburg SMSA Cont'd.													
21. Hookers Point													
Tampa Electric													
Boiler 1 *	43.4			RFRO	-	100	.	None	None		1948	105	10
2				RFRO	-	100	.	"	"		1948		
3	64.1			RFRO	-	100	.	"	"		1950	160	
4				RFRO	-	100	.	"	"		1950		
5	46.5			RFRO	-	100	.	"	"		1953	115	
6	78.6			RTAN	-	100	.	"	"		1955	195	
	232.6	54	13.72		- des.	100 oil	.						
34. Big Bend													
Tampa Electric													
Boiler 1	445.5	37	15.33	PCOP	100 des p. coal	-	-	Wet	E	98.7	1970	645	10
AREA TOTAL	2851.8		61.96										

* Boiler capacities prorated to give total plant capacity.

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: FLORIDA

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} $\frac{BTU}{yr}$	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANS. DISTANCE Miles
Miami SMSA													
15. Turkey Point													
Florida Power & Light													
Boiler 1	402.1			RFRO				None	MCAX	84	1967	945	25
2	402.5			RFRO				None	MCAX	84	1968	945	
	804.6	65	44.39		- des.oil	61	39 gas						
8. Cutler													
Florida Power & Light													
Boiler 3	46			RFRO				None	MCAX	88(d)	1949	55	15
4	69			RTAN				None	MCAX	88(d)	1952	85	
5	75			RTAN				None	MCAX	88(d)	1954	90	
6	156.25			RTAN				None	MCAX	88(d)	1955	190	
	346.25	28	10.18		- des.oil	23	77 gas						
37. Miami													
Florida Power & Light													
Boiler 11	46			RFRO				None	MCAX	88(d)	1948	105	
12				RFRO				None	MCAX	88(d)	1948		
	46	46	2.51		- des.oil/gas	2	98						
AREA TOTAL	1196.9		57.08										

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: Florida

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} $\frac{BTU}{yr}$	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANS. DISTANCE Miles
Orlando SMSA													
14. Sanford Florida Power & Light Boiler 3	156.3	61	8.74	RFRO	-	84 des.oil	16 gas	None	None	-	1959	370	15
45. Lake Highland Orlando Utilities Comm. Boiler 1	28			RFRO/ GFRO				None	None	-	1949	40	
2				RFRO/ GFRO				None	None	-	1949		
3	34			RFRO/ GFRO				None	None	-	1954	50	
4	34			RFRO/ GFRO				None	None	-	1956	50	
	96	28	3.27		-	9 des.oil/gas	91						
AREA TOTAL	252.3		12.01										

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: Florida

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} $\frac{BTU}{yr}$	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANS. DISTANCE Miles
Collier County													
12. Pt. Everglades Florida Power & Light													
Boiler 1	225.2			RFRO				None	MCAX	85(d)	1960	565	30
2	225.2			RFRO				None	MCAX	85(d)	1961	565	
3	402.1			RFRO				None	MCAX	88(d)	1964	1005	
4	402.1			RFRO				None	MCAX	88(d)	1965	1005	
	1254.6	67	73.89		-	62	38						
					des.	oil	gas						
AREA TOTAL	1254.6		73.89										Miami 70
Key West													
36. Key West Key West Utility Board													
Boiler 1													<5
2				*	-	100	-	*	*	*			
3					-	100	-						
4					-	100	-						
5					-		-						
					-		-				1963		
	68.8	54**	3.9		-	100	-				1966		
					des.	oil						165	
AREA TOTAL	68.8		3.9										

* No FPC 67 filed
** State average used

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: Florida

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} $\frac{BTU}{yr}$	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANS. DISTANCE Miles
Melbourne-Titusville-Cocoa SMSA													
7. Cape Kennedy Florida Power & Light													
Boiler 1	402			RFRO				None	MCAX	84	1965	1080	7
2	402			RFRO					MCAX	84	1969	1080	
	804	74	41.17		- des.	62 oil	38 gas						
33. Indian River Orlando Utility Commission													
Boiler 1	78.5			RTAN/ GTAN				None	None	-	1960	160	7
2	180			RTAN/ GTAN				"	"	-	1964	375	
	258.5	54	12.65		- des.	36 oil	64 gas						
AREA TOTAL -	1062.5		53.82										
Highlands County													
1. Avon Park Florida Power Corp.													
Boiler 1AB	15			RFRO				None	None	-	1928	25	10
2	46			GTAN				"	"	-	1952	85	
	61	41	2.71		- des.	36 oil	64 gas						Tampa 63
AREA TOTAL	61.0		2.71										Orlando 60

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: FLORIDA

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} $\frac{BTU}{yr}$	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANS. DISTANCE Miles
Gainesville SMSA													
11. Palatka													
Florida Power & Light													
Boiler 1	34.5			RFRO				None	None	-	1951	90	12
2	75			RTAN				None	None	-	1956	195	
	109.5	60	6.83		- des.	88 oil	12 gas						
40. Gainesville													
City of Gainesville	99	49	4.80	*	- des.	5 oil	95 gas	*	*	*		200	- Jacksonville 63
AREA TOTAL	208.5		11.63										
Daytona Beach SMSA													
4. Turner													
Florida Power Corp.													
Boiler 1	12.5			RFRO				None	None	-	1926	30	
2	28.7			GFRO				None	None	-	1946	75	
3	78.8			GFRO				None	None	-	1955	205	
4	81.6			GOPP				None	None	-	1959	210	
	201.6	60	12.56		- des.	16 oil	84 gas						
AREA TOTAL	201.6		12.56										

* No FPC 67 filed

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: Florida

SMSA-COUNTY/PLANT	RATED CAPACITY	LOAD FACTOR	ENERGY RQMT.	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU %			BOTTOM ASH HANDLING	AIR POLLUTION CONTROL		INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY"	TYPICAL TRANS. DISTANCE
	MW	%	10^{12} BTU/yr		COAL	OIL	GAS		TYPE	EFF. %		tons/day	Miles
Jacksonville SMSA , Nassau County													
24. Kennedy													
Jacksonville Electric Authority													
Boiler 8	50			RFRO	-	100	-	None	None	-	1955	110	<5
9	50			RFRO	-	100	-	"	"	-	1955	110	
10	149.6			RFRO	-	100	-	"	"	-	1961	330	
14	249.6	53	13.03		- des.	100 oil	-						
25. Northside													
Jacksonville Electric Authority													
Boiler 1	297.5	47	12.01	ROPP	- des.	100 oil	-	None	None	-	1966	505	<5
26. Southside													
Jacksonville Electric Authority													
Boiler 1	37.5			RFRO	-	100	-	None	None	-	1950	70	<5
2	37.5			RFRO	-	100	-	"	"	-	1951	70	
3	50			RFRO	-	100	-	"	"	-	1955	95	
4	75			RFRO	-	100	-	"	"	-	1958	145	
5	156.6			RFRO	-	100	-	"	"	-	1964	305	
	356.6	49	16.47		- des.	100 oil	-						
AREA TOTAL	903.7		41.51										

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: Florida

SMSA-COUNTY/PLANT	RATED CAPACITY	LOAD FACTOR	ENERGY RQMT.	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU %			BOTTOM ASH HANDLING	AIR POLLUTION CONTROL		INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY"	TYPICAL TRANS. DISTANCE
	MW	%	10^{12} $\frac{BTU}{yr}$		COAL	OIL	GAS		TYPE	EFF. %		tons/day	Miles
Fort Myers SMSA													
9. Fort Myers													
Florida Power & Light													
Boiler 1	156.3			RFRO	-	100	-	None	None	-	1958	270	<5
2	402			RFRO	-	100	-	"	MCAX	84 (d)	1969	700	
	558.3	48	22.81		- des.	100 oil	-						
AREA TOTAL	558.3		22.81										
Tallahassee SMSA													
23. Purdom													
City of Tallahassee													
Boiler 1	7.5			RFRO				None	None		1952	20	<5
2	7.5			RFRO				"	"		1952	20	
3	7.5			RFRO/ GFRO				"	"		1952	20	
4	7.5			RFRO/ GFRO				"	"		1954	20	
5	22			RTAN/ GTAN				"	"		1958	65	
6	22			RFRO/ GFRO				"	"		1961	65	
7	44			RFRO/ GFRO				"	"		1966	130	
	118	51	8.36		- des.	15 oil	85 gas						

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: Florida

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} $\frac{BTU}{yr}$	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANS. DISTANCE Miles
Tallahassee SMSA Cont'd.													
28. Hopkins City of Tallahassee	75	54	3.36	RFRO/ GFRO	-	-	100	None	None	-	1971	140	< 5
					des.	oil	gas						
AREA TOTAL	193.0		11.72										
Suwannee County													
6. Suwannee Florida Power Corp. Boiler 1	34.5			GTAN/ RTAN				None	None		1953	95	10
2	37.5			GFRO/ RFRO				"	"		1954	100	
3	75			GFRO				"	"		1956	205	
	147	65	9.47		-	61	39						
					des.	oil	gas						
AREA TOTAL -	147		9.47										

Jacksonville 85

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: FLORIDA

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} BTU/yr	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANS. DISTANCE Miles
Citrus County-Levy County													
5. Crystal River Florida Power Corp.													
Boiler 1	440.5			RTAN				None	None	-	1966	800	5
2	523.8			PCTA				Dry	E	95	1969	950	
	964.3	50	40.9		39	61	-						
					des.p.coal								
39. Inglis Florida Power Corp													
Boiler 1	12.5			GFRO				None	None	-	1926	20	
3				GFRO				None	None	-	1926		
2	12.5			GFRO				None	None	-	1926	20	
4				GFRO				None	None	-	1926		
6	28.8			GFRO				None	None	-	1947	50	
	53.8	36	2.33		-	31	69						
					des.oil/gas								
AREA TOTAL	1018.1	43.23											Gainesville 50

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: Florida

SMSA-COUNTY/PLANT	RATED CAPACITY	LOAD FACTOR	ENERGY RQMT.	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU %			BOTTOM ASH HANDLING	AIR POLLUTION CONTROL		INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY"	TYPICAL TRANS. DISTANCE
	MW	%	10^{12} $\frac{BTU}{yr}$		COAL	OIL	GAS		TYPE	EFF. %		tons/day	Miles
Indian River, St. Lucie and Martin Counties													
16. King													
City of Fort Pierce													
Boiler 1	0.5			*				*	*	*	1924	-	7
2	1.5										1937	-	
3	2.6										1937	-	
4	5.1										1948	5	
5	7.7										1953	10	
6	16.9										1958	25	
7	37.3										1964	55	
	71.6	32	2.61		-	34	66						
					des.	oil	gas					West Palm Beach 45	
AREA TOTAL	71.6		2.61										
West Palm Beach SMSA													
13. Riviera													
Florida Power & Light													
Plant 1AB	43.8			RFRO				None	MCAX	78.5(d)	1946	90	5
2	75			RTAN				"	MCAX	88(d)	1953	160	
3	310.4			RFRO				"	MCAX	88(d)	1962	660	
4	310.4			RFRO				"	MCAX	88(d)	1963	660	
	729.6	56	36.53		-	54	46						
					des.	oil	gas						
AREA TOTAL	729.6		36.53										

* No FPC-67 filed.

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: Florida

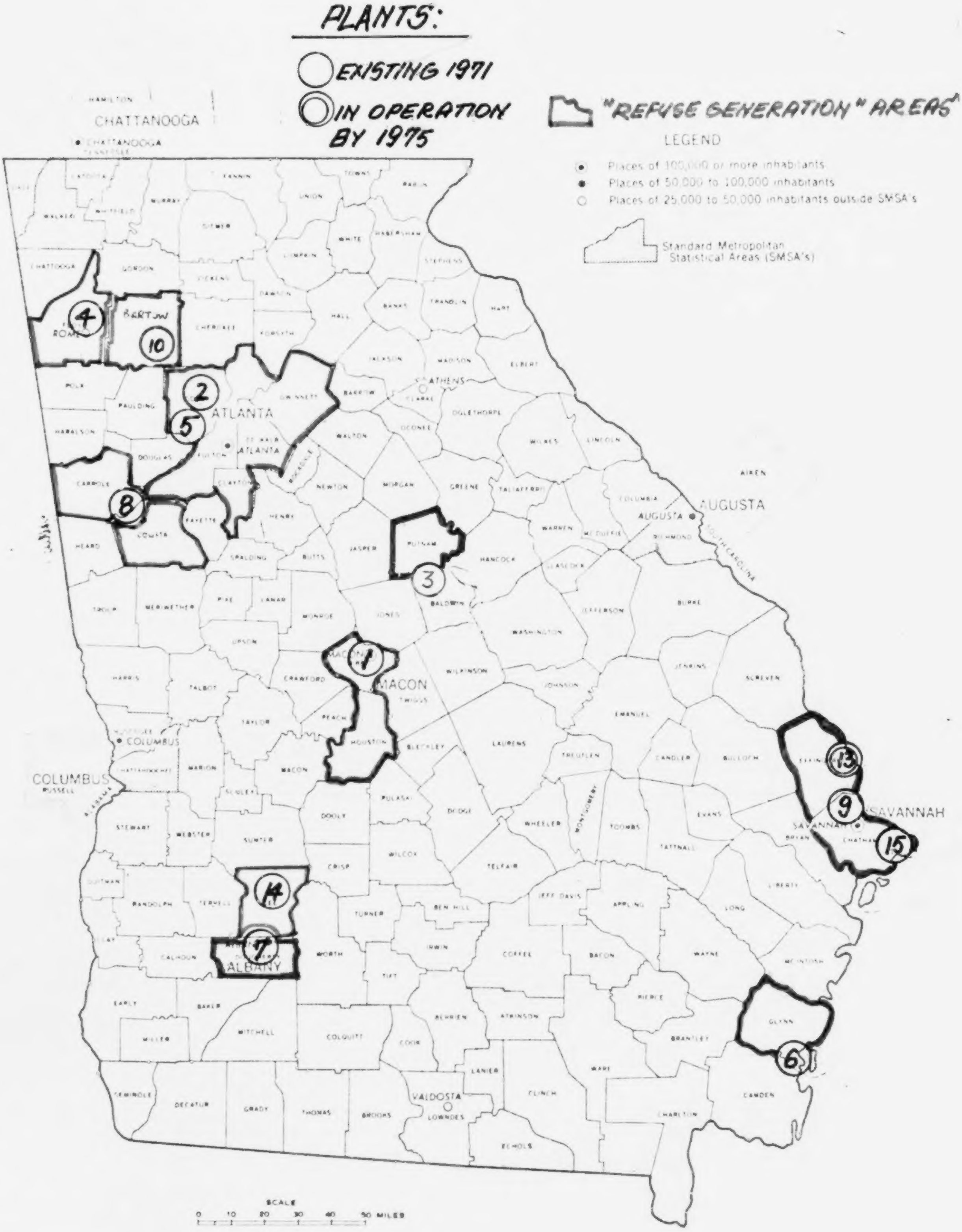
SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} $\frac{BTU}{yr}$	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANS. DISTANCE Miles
Fort Lauderdale SMSA													
10. Lauderdale Florida Power & Light													
Boiler 4	156.25			RFRO				None	None	-	1957	330	<5
5	156.25			RFRO				"	"	-	1958	330	
	312.50	54	15.69		des.	36 oil	64 gas						
AREA TOTAL	312.50		15.69										
Pensacola SMSA													
17. Crist Gulf Power Co.													
Boiler 1	28.2			RFRO/ GFRO				None	None	-	1944	60	<5
2	28.2			RFRO/ GFRO				"	"	-	1949	60	
3	37.5			RFRO/ GFRO				"	"	-	1952	85	
4	93.8			PCTA/ GTAN				Dry	E	99.1	1959	210	
5	93.8			PCTA/ GTAN				Dry	E	99.1	1961	210	
6	369.8			GFRO/ PCFR				Dry	E	99.4	1970	840	
	651.3	55	34.59		37 des. s. coal	2 oil	61 gas						
AREA TOTAL	651.3		34.59										

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: Florida

SMSA-COUNTY/PLANT	RATED CAPACITY	LOAD FACTOR	ENERGY RQMT.	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU %			BOTTOM ASH HANDLING	AIR POLLUTION CONTROL		INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY"	TYPICAL TRANS. DISTANCE
	MW	%	$10^{12}\ \frac{BTU}{yr}$		COAL	OIL	GAS		TYPE	EFF. %		tons/day	Miles
Jackson County													
19. Scholz (River Junction) Gulf Power Co.													
Boiler 1	49			PCFR	100	-	-	Dry	MCAX	65	1953	110	10
2	49			PCFR	100	-	-	Dry	MCAX	65	1953	110	
	98	50	5.37		100	-	-						
					des.coal								Tallahassee 40
AREA TOTAL	98.0		5.37										
Bay County													
18. Lansing Smith Gulf Power Co.													
Boiler 1	149.6			PCTA	100	-	-	Dry	E	96.8	1965	330	<5
2	190.4			PCTA	100	-	-	Dry	E	98.7	1967	425	
	340	59	17.80		100	-	-						
					des.p.coal								
AREA TOTAL	340.0		17.80										Tallahassee 80

GEORGIA


PLANTS:
EXISTING 1971
IN OPERATION BY 1975
"REFUSE GENERATION" AREAS
LEGEND
Places of 100,000 or more inhabitants
Places of 50,000 to 100,000 inhabitants
Places of 25,000 to 50,000 inhabitants outside SMSA's
Standard Metropolitan Statistical Areas (SMSA's)
CHATTANOOGA
ATLANTA
ATHENS
AUGUSTA
MACON
COLUMBUS
SAVANNAH
ALBANY
VALDOSTA
ROME
BARTOW
PUTNAM
GLYNN
1
2
3
4
5
6
7
8
9
10
13
14
15
SCALE
0 10 20 30 40 50 MILES

REFUSE COMBUSTION FOR POWER GENERATION
Georgia, 1971 - All Fossil Fuel Plants

AREA	RATED CAPACITY MW	(b) ENERGY RQMT. 10^{12} $\frac{BTU}{yr}$	AREA POP. millions	(a) REFUSE GENERATION		POTENTIAL ENERGY SUPPLY FROM REFUSE (a/b %)	TYPICAL TRANS. DISTANCE Miles
				10^6 $\frac{tons}{yr}$	10^{12} $\frac{BTU}{yr}$		
Albany SMSA	218.3	12.0	0.090	0.05	0.53	4.4	<5
Atlanta SMSA	856.4	54.5	1.429	0.93	8.45	15.5	<5
Macon SMSA	181.3	13.5	0.210	0.13	1.24	9.2	<5
Savannah SMSA (incl. Effingham Co.)	318.0	19.8	0.204	0.34	1.21	6.1	9
Putnam County	1746.2	83.0	0.009	0.00	0.05	0.1	
Bartow County	1400.0	61.3	0.033	0.02	0.17	0.3	5
Carroll County	680.0	40.6	0.047	0.02	0.25	6.2	<5
Floyd County	953.0	39.8	0.076	0.04	0.40	1.0	<5
Glynn County	143.8	8.8	0.051	0.03	0.27	3.1	<5
Lee County	10.0	0.4	0.007	0.00	0.03	9.3	15
GEORGIA STATE TOTALS	6507.0	334.0	2.166	1.40	12.63	3.8	

Includes all plants detailed on attached data sheets.

REFUSE COMBUSTION FOR POWER GENERATION
Georgia, 1971 - "Coal Plants" Only

AREA	RATED CAPACITY MW	(b) ENERGY RQMT. $10^{12}\frac{BTU}{yr}$	AREA POP. millions	(a) REFUSE GENERATION $10^{6}\frac{tons}{yr}$	$10^{12}\frac{BTU}{yr}$	POTENTIAL ENERGY SUPPLY FROM REFUSE (a/b %)	TYPICAL TRANS. DISTANCE Miles
Albany SMSA	218.3	12.0	0.090	0.05	0.53	4.4	<5
Atlanta SMSA	856.4	54.5	1.429	0.93	8.45	15.5	<5
Macon SMSA	181.3	13.5	0.210	0.13	1.24	9.2	<5
Savannah SMSA (incl. Effingham County)	207.0	15.1	0.204	0.13	1.21	8.0	10
Putnam County	1746.2	83.0	0.009	0.00	0.05	0.1	
Bartow County	1400.0	61.3	0.033	0.02	0.17	0.3	5
Carroll County	680.0	40.6	0.047	0.02	0.25	6.2	<5
Floyd County	953.0	39.8	0.076	0.04	0.40	1.0	5
Glynn County	143.8	8.8	0.051	0.03	0.27	3.1	<5
Lee County	10.0	0.4	0.007	0.00	0.03	9.3	15
GEORGIA STATE TOTALS	6396.0	329.2	2.166	1.40	12.63	3.8	

Includes all plants capable* of burning coal (design fuel and/or current fuel). Includes all plants in attached data sheets except No. 15 (Savannah SMSA).

* Does not differentiate between types of firing -- assumes all types capable of refuse burning.

YEAR: 1971
STATE: Georgia

REFUSE COMBUSTION FOR POWER GENERATION

SMSA-COUNTY/PLANT	RATED CAPACITY	LOAD FACTOR	ENERGY RQMT.	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU %			BOTTOM ASH HANDLING	AIR POLLUTION CONTROL		INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY"	TYPICAL TRANS. DISTANCE
	MW	%	10^{12} $\frac{BTU}{yr}$		COAL	OIL	GAS		TYPE	EFF. %		tons/day	Miles
Atlanta SMSA													
2. Atkinson													
(Georgia Power Co.)													
Boiler 1	61			PCFR				DRY	E	90	1930	220	<5
2	61			PCTA				DRY	E	90	1941	220	
3	61			PCTA				DRY	E	90	1945	220	
4	75			PCTA				DRY	E	90	1948	270	
	258	68	22.01		16	-	84						
					des. p. coal		gas						
5. McDonough													
(Georgia Power Co.)													
Boiler 1	299.2			PCTA				WET	E	98	1963	695	<5
2	299.2			PCTA				WET	E	98	1964	695	
	598.4	65	32.56		84	-	16						
					des. p. coal		gas						
AREA TOTAL	856.4		54.57										
Floyd County													
4. Hammond													
(Georgia Power Co.)													
Boiler 1	125							WET	Cycl/E	30/96	1954	220	<5
2	125							WET	E	95	1954	220	
3	125							WET	E	92	1955	220	Gadsden 40
4	578							WET	E	90	1970	1035	Atlanta 80
	953	43	39.81		100	-	-						
					des. p. coal								
AREA TOTAL	953		39.81										

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: Georgia

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} BTU/yr	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANS. DIST. Miles
Glynn County													
6. McManus													
(Georgia Power Co.)													
Boiler 1	50			PCFR				WET	E	98	1952	130	<5
2	93.8			PCFR				WET	E	98	1959	245	
	143.8	64	8.88		84	16	-						Savannah 60
					des. p. coal								
AREA TOTAL	143.8		8.88										
Macon SMSA													
1. Arkwright													
(Georgia Power Co.)													
Boiler 1	46			PCTA				DRY	E	80	1942	145	<5
2	46			PCTA				DRY	E	83	1942	145	
3	43.3			RTAN				DRY	MECH	70	1943	135	
4	46			GTAN				DRY	E	93	1948	145	
	181.3	67	13.52		36	-	64						
					des. p. coal		gas						
AREA TOTAL	181.3		13.52										
Bartow County													
10. Bowen													
(Georgia Power Co.)													
Boiler 1	700			PCTA	100	-	-	DRY	E	98.12	1971	1305	5
2	700			PCTA	100	-	-	DRY	E	98	1971	1305	
	1400	50	61.32*		100	-	-						Atlanta 20
AREA TOTAL	1400	-	61.32		des p. coal								

* Plant started up in 1971. This figure represents a load factor of 50% (average for Georgia). The actual factor in 1971 was only 6.5%

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: Georgia

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} $\frac{BTU}{yr}$	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	 OIL	 GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	 EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANS. DISTANCE Miles
Savannah SMSA													
Effingham County													
9. Port Wentworth (Savannah Electric Power Co.)													
Boiler 1	50			PCTA				WET	MCTA	92.5	1957	155	10
2	54			RTAN				WET	MCTA	92.5	1961	165	
3	103			GTAN				WET	MCTA	86.1	1965	320	
	207	77	15.11		6 des. coal	61 oil	33 gas						
15. Riverside (Savannah Electric Power Co.)													
Boiler 7	25			RFRO				None	None	--	1926	45	5
8				RFRO				"	"	-	1926		
9				RFRO GFRO				"	"	-	1940	45	
10	25			RFRO GFRO				"	"	-	1949		
11	25			RTAN GTAN				"	"	-	1953	45	
12	36			RTAN GTAN				"	"	-	1955	65	
	111	35	4.77		des -	20 oil	80 gas						
AREA TOTAL	318		19.88										

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: Georgia

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. $10^{12}\ \frac{BTU}{yr}$	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANS. DISTANCE Miles
Putnam County													
3. Harllee Branch													
(Georgia Power Co.)													
Boiler 1	299.2			PCOP	100	-		WET	E	95	1965	610	<5
2	359			PCOP	100	-		WET	E	96	1967	730	
3	544			PCOP	100	-	-	WET	E	97	1968	1105	
4	544			PCOP	100	-	-	WET	E	98	1969	1105	Macon 35
	1746.2	54	83.04		100	-	-						
					des. p. coal								
AREA TOTAL	1746.2		83.04										
Albany SMSA													
7. Mitchell													
(Georgia Power Co.)													
Boiler 1 **	28.9			PCFR	100	-	-	DRY	E	85	1948	65	<5
2	28.9			PCFR	100	-	-	DRY	E	85	1948	65	
3	160.5			PCTA	100	-	-	DRY	E	92	1964	375	
	218.3	58	12.00		100	-	-						
					des. p. coal								
AREA TOTAL	218.3		12.0										
Lee County													
14. Warwick													
(Crisp County Power Co.)	10	41	0.40		100	-	-	*	*	*	-	15	15
					des. p. coal								
AREA TOTAL	10		0.40										Albany 10

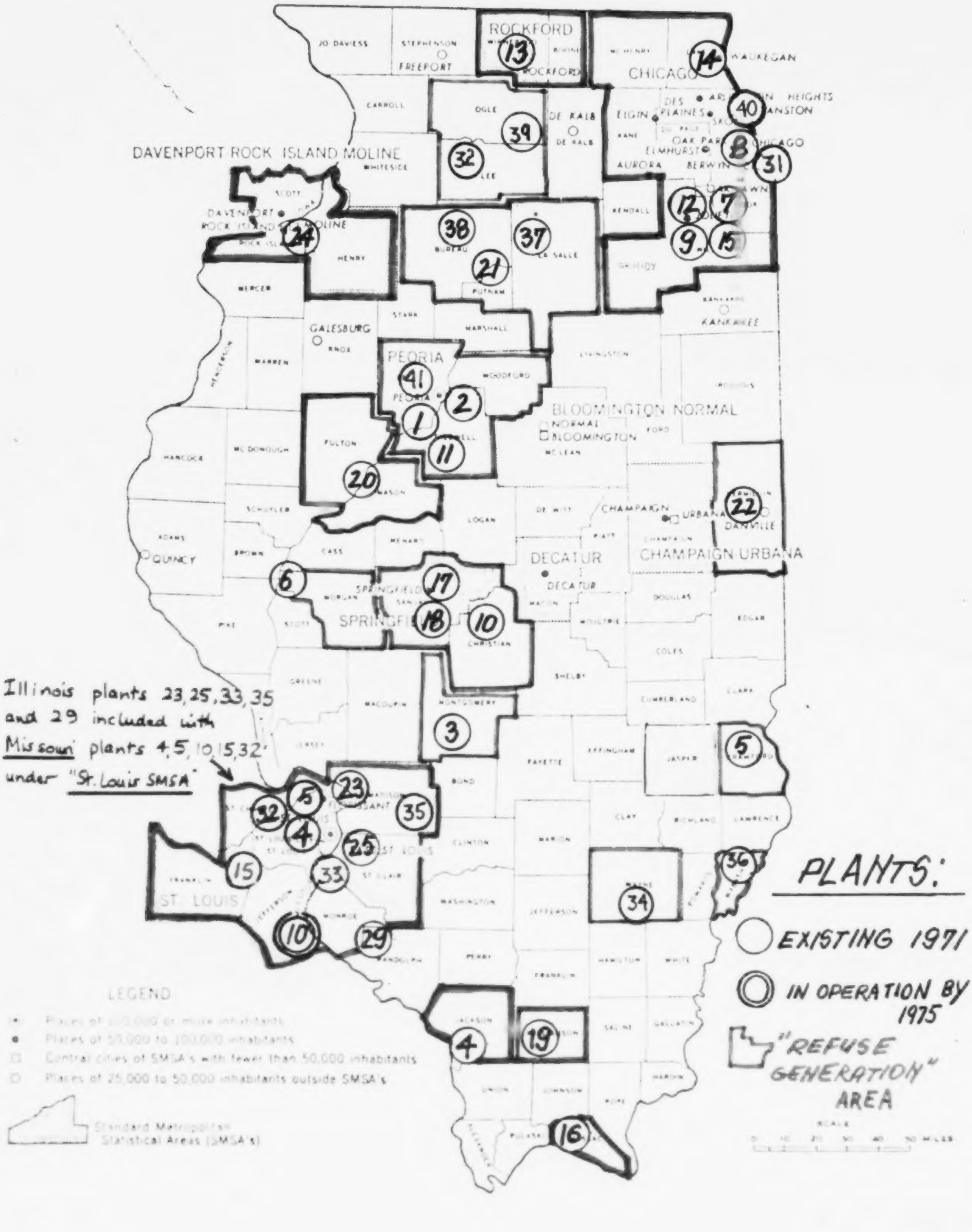
** Boiler capacities prorated to give total plant capacity . * No FPC-67 filed.

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: Georgia

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} BTU/yr	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU %			BOTTOM ASH HANDLING	AIR POLLUTION CONTROL		INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANS. DISTANCE Miles
					COAL	OIL	GAS		TYPE	EFF. %			
Carroll County													
8. Yates (Georgia Power Co.)													
Boiler 1 *	124			GTAN				WET	MCAX/E	98.2	1950	310	<5
2	124			GTAN				WET	E	97.8	1950	310	
3	124			PCTA				WET	E	97.8	1952	310	Atlanta 40
4	154			PCTA				WET	E/MCAX	98.6(t)	1957	385	
5	154			PCTA				WET	E	96.8(t)	1958	385	
	680	62	40.63		48	-	52						
					des. p. coal								
AREA TOTAL	680		40.63										

* Boiler capacities prorated to give total plant capacity


ROCKFORD
CHICAGO
WAUKEGAN
DAVENPORT ROCK ISLAND MOLINE
PEORIA
BLOOMINGTON NORMAL
CHAMPAIGN URBANA
DECATUR
SPRINGFIELD
ST. LOUIS
JO DAVIESS
STEPHENSON
FREEPORT
CARROLL
OGLE
DE KALB
LEE
WHITESIDE
HENRY
MERCER
BUREAU
LA SALLE
PUTNAM
KENDALL
GRUNDY
KANKAKEE
GALESBURG
KNOX
STARK
MARSHALL
WARREN
HENDERSON
WOODFORD
LIVINGSTON
IROQUOIS
FORD
MC DONOUGH
HANCOCK
FULTON
MASON
MC LEAN
SCHUYLER
ADAMS
QUINCY
BROWN
CASS
LOGAN
DE WITT
PIATT
MENARD
MORGAN
SCOTT
PIKE
SANGAMON
CHRISTIAN
MACON
MOULTRIE
DOUGLAS
EDGAR
COLES
SHELBY
CLARK
CUMBERLAND
GREENE
MACOUPIN
MONTGOMERY
JERSEY
FAYETTE
EFFINGHAM
JASPER
CRAWFORD
BOND
MADISON
CLAY
RICHLAND
LAWRENCE
CLINTON
MARION
ST. CLAIR
WASHINGTON
JEFFERSON
WAYNE
EDWARDS
WABASH
MONROE
RANDOLPH
PERRY
FRANKLIN
HAMILTON
WHITE
JACKSON
WILLIAMSON
SALINE
GALLATIN
UNION
JOHNSON
POPE
HARDIN
ALEXANDER
PULASKI
MASSAC
ELGIN
DES PLAINES
ARLINGTON HEIGHTS
EVANSTON
SKOKIE
OAK PARK
CHICAGO
ELMHURST
BERWYN
AURORA
KANE
DU PAGE
OAK LAWN
WILL
URBANA
DANVILLE
VERMILION
NORMAL
BLOOMINGTON
FLORISSANT
13
14
40
8
31
39
32
12
7
9
15
24
38
37
21
41
2
1
11
20
22
6
17
18
10
3
5
23
5
32
4
35
25
15
33
10
29
36
34
4
19
16
LEGEND
Places of 100,000 or more inhabitants
Places of 50,000 to 100,000 inhabitants
Central cities of SMSA's with fewer than 50,000 inhabitants
Places of 25,000 to 50,000 inhabitants outside SMSA's
Standard Metropolitan Statistical Areas (SMSA's)
PLANTS:
EXISTING 1971
IN OPERATION BY 1975
"REFUSE GENERATION" AREA
SCALE
0 10 20 30 40 50 MILES

Illinois plants 23,25,33,35 and 29 included with Missouri plants 4,5,10,15,32 under "St. Louis SMSA"

REFUSE COMBUSTION FOR POWER GENERATION
Illinois, 1971 - "Coal Plants" Only

AREA	RATED CAPACITY MW	(b) ENERGY RQMT. 10^{12} $\frac{BTU}{yr}$	AREA POP. millions	(a) REFUSE GENERATION 10^6 $\frac{tons}{yr}$	10^{12} $\frac{BTU}{yr}$	POTENTIAL ENERGY SUPPLY FROM REFUSE (a/b %)	TYPICAL TRANS. DISTANCE Miles
Chicago SMSA (incl. Grundy Co.)	6169.7	293.3	7.116	4.67	42.08	14.3	21
Davenport-Rock Island-Moline SMSA	99.1	4.7	0.366	0.24	2.16	45.8	<5
Peoria SMSA	1139.8	54.0	0.347	0.22	2.05	3.8	5
Rockford SMSA	146.4	10.2	0.276	0.18	1.63	15.9	<5
Springfield SMSA (incl. Christian Co.)	1545.4	71.8	0.201	0.13	1.19	1.7	13
Bureau-LaSalle-Putnam Cos.	324.4	19.6	0.157	0.09	0.84	4.3	10
Crawford County	200.0	9.7	0.020	0.01	0.11	1.1	5
Fulton-Mason Counties	230.0	9.5	0.059	0.03	0.31	3.3	5
Jackson County	232.7	11.0	0.056	0.03	0.30	2.7	10
Lee-Ogle Counties	131.7	8.8	0.082	0.04	0.44	5.0	
Massac County	110.4	69.5	0.014	0.00	0.07	0.1	15
Montgomery County	330.0	18.8	0.031	0.01	0.17	0.9	5
Morgan County	354.4	17.6	0.037	0.02	0.20	1.1	15
Vermillion County	182.3	10.5	0.099	0.05	0.53	5.0	7
Williamson County	99.0	54.9	0.050	0.03	0.27	0.5	5
[illegible] County	20.5	[illegible]	0.013	0.00	0.07	7.7	
Wayne County	12.5	0.5	0.017	0.01	0.09	18.1	
ILLINOIS STATE TOTALS	12318.3	665.7	8.940	5.83	52.51	7.9	

Includes all plants capable* of burning coal (design fuel and/or current fuel). Includes all plants in attached data sheets.

* Does not differentiate between types of firing--assumes all types capable of refuse burning.

REFUSE COMBUSTION FOR POWER GENERATION
Illinois, 1971 - All Fossil Fuel Plants - identical to table above

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: ILLINOIS

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. $10^{12}\ \frac{BTU}{yr}$	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANS. DISTANCE Miles
Chicago SMSA													
14. Waukegan													
Commonwealth Edison													
Boiler 10	240			PCFR				DRY	E	95(d)	1956	530	35
12				PCFR				WET	E	95(d)	1930		
13				CYCL				WET	E	95(d)	1930		
14				PCFR/ GFRO				WET	E	95(d)	1931		
15				PCFR/ GFRO				WET	E	95(d)	1931		
16				PCFR/ GFRO				WET	E	95(d)	1931		
17	121.8			CYCL/ GFRO				WET	-	-	1952	270	
7	326			PCTA/ GTAN				DRY	E	98(d)	1958	730	
8	355			PCTA/ GTAN				DRY	E	98(d)	1962	795	
	1042.8	57	59.54		83 des.p.coal	-	17 gas						
8. Fisk													
Commonwealth Edison													
Boiler 17-1	189.2			PCFR				WET	E	98(d)	1942	325	<5
17-2				PCFR				WET	E	98(d)	1942		
18-1				CYCL				WET	C	98(d)	1943		
18-2				CYCL				WET	C	98(d)	1949		
19	357.4			PCTA/ GTAN				DRY	E	98(d)	1959	620	
	546.6	45	22.53		50 des.p.coal	-	50 gas						

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: ILLINOIS

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} $\frac{BTU}{yr}$	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANS. DISTANCE Miles
Chicago SMSA cont'd													
31. Calumet													
Comm. Edison													
Boiler 1	*			GTAN/ PCTA				Wet	E	95(d)	1947		< 5
2				GTAN/ PCTA				Wet	E	95(d)	1947		
	107	65	7.72		31	-	69					32[illegible]	
					des p-coal/gas								
40. Winnetka													
Village of Winnetka													
Boiler 4	7.5			OSTO				Dry	None	-	1958	1[illegible]	20
8	10			SPRE				Dry	IMPE	91.8(d)	1964	2[illegible]	
7	5			OSTO				Dry	None	-	1948	1[illegible]	
6 }	3			OSTO				Dry	None	-	1938	} [illegible]	
5 }				OSTO				Dry	None	-	1938		
	25.5	33	1.30		27	-	73						
					des s-coal								

* No boiler breakdown available

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: ILLINOIS

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} BTU/yr	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANS. DISTANCE Miles
Chicago SMSA Cont'd.													
12. Ridgeland													
Commonwealth Edison													
Boiler 1	172			CYCL/ GFRO				WET	E	98(d)	1951	410	20
2				CYCL/ GFRO				WET	E	98(d)	1951		
3	172			CYCL/ GFRO				WET	E	98(d)	1950	410	
4				CYCL/ GFRO				WET	E	98(d)	1950		
5	173			CYCL/ GFRO				WET	E	90(d)	1953	410	
6	173			CYCL/ GFRO				WET	E	90(d)	1955	410	
	690	60	38.56		1	99	-						
					des.	oil	gas						
7. Crawford													
Commonwealth Edison													
Boiler 61	104			GFRO				-	-	-	1968	205	20
62				GFRO				-	-	-	1968		
63				GFRO				-	-	-	1968		
64				GFRO				-	-	-	1968		
65				GFRO				-	-	-	1968		
66				GFRO				-	-	-	1968		
7	239.5			PCTA/ GTAN				DRY	E	98(d)	1958	470	
8	358			PCTA/ GTAN				DRY	E	98(d)	1961	700	
	701.5	51	32.41		36	-	64						
					des.p.coal		gas						

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: ILLINOIS

SMSA-COUNTY/PLANT	RATED CAPACITY	LOAD FACTOR	ENERGY RQMT.	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU %			BOTTOM ASH HANDLING	AIR POLLUTION CONTROL		INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY"	TYPICAL TRANS. DISTANCE
	MW	%	10^{12} $\frac{BTU}{yr}$		COAL	OIL	GAS		TYPE	EFF. %		tons/day	Miles
Chicago SMSA Cont'd.													
15. Will County													
Commonwealth Edison													
Boiler 1	188			CYCL	100	-	-	WET	E	91(d)	1955	385	20
2	184			CYCL	100	-	-	WET	E	91(d)	1955	375	
3	298.9			PCTA	100	-	-	DRY	E	98(d)	1957	610	
4	598			PCTA	100	-	-	DRY	E	98(d)	1963	1230	
	1268.9	56	60.83		100	-	-						
					des.p.coal								
9. Joliet													
Commonwealth Edison													
Boiler 1	72			PCFR				WET	None	-	1941	125	20
2				PCFR				WET	"	-	1950		
3	102.5			CYCL/GFRO				WET	E	95.7	1950		
4				CYCL/GFRO				WET	E	95.7	1950	180	
5	345.6			CYCL/GFRO				WET	E	98(d)	1959	610	
71	633.5			PCTA				DRY	E	99(d)	1965	1125	
72				PCTA				DRY	E	99(d)	1965		
81	633.5			PCTA				DRY	E	99(d)	1965	1125	
82				PCTA				DRY	E	99(d)	1966		
	1787.4	47	75.02		89	-	16						
					des.p.coal		gas						
AREA TOTAL	6169.7		293.31										

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: ILLINOIS

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} BTU/yr	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANS. DISTANCE Miles
Rockford SMSA													
13. Sabrooke													
Commonwealth Edison													
Boiler 1	19.4			SPRE/ GOPP				DRY	MCAX	92(d)	1949	55	<5
2	35			SPRE/ GOPP				DRY	MCAX	92(d)	1952	100	
3	38			SPRE/ GOPP				DRY	MCAX	92(d)	1955	110	
4	54			PCTA/ GTAN				DRY	E	96(d)	1961	160	
	146.4	69	10.23		55	-	45						
AREA TOTAL	146.4		10.23		des.p.coal		gas						
Davenport-RockIsland-Moline SMSA													
24. Moline													
Iowa-Illinois Gas & Elec. Co.													
Boiler 16	8			SPRE/ GOPP				DRY	none		1942	15	<5
17	8			SPRE/ GOPP				DRY	none		1942	15	
18	8			SPRE/ GOPP				DRY	none		1942	15	
19	5			SPRE				DRY	none		1918	10	
20	5			SPRE				DRY	none		1918	10	
21	5			SPRE				DRY	none		1918	10	
22	10.1			RFRO/ GFRO				DRY	none		1952	20	
23	25			RFRO/ GFRO				DRY	none		1953	50	
24	25			RFRO/ GFRO				DRY	none		1954	50	
	99.1	41	4.72		8	1	91						
AREA TOTAL	99.1		4.72		des.p.coal		gas						

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: ILLINOIS

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} BTU/yr	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANS. DISTANCE Miles
Bureau-LaSalle-Putnam Counties													
21. Hennepin Illinois Power Company													
Boiler 1	75			PCTA/ GTAN				DRY	MCAX	83.5	1953	19	10
2	231.3			PCTA/ GTAN				DRY	MCAX	85	1959	61	
-	306.3	70	19.07		42 des.p.coal	-	58 gas						
37. Peru Mount Carmel Public Utility*	15.3	33	0.53		100 des.p.coal	-	-	*	*	*	-	2	10
38. Princeton Princeton Municipal Utilities*	2.8	14	0.04		- des.p.coal	-	- gas	*	*	*	-		10
AREA TOTAL	324.4		19.64										
													Moline 60

* No FPC-67 filed.

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: ILLINOIS

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} $\frac{BTU}{yr}$	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	 OIL	 GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	 EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANS. DISTANCE Miles
Peoria SMSA													
1. Edwards													
Central Illinois Light Co.													
Boiler 1	136			PCFR				Wet	E	98	1960	31	10
2	280			PCFR				Wet	E	99	1968	64	
	416	65	22.48		99	1	-						
					des. p. coal								
41. Keystone													
Central Illinois Light Co.													
Boiler 1	7.5			SPRE				Dry	Cycl	80	1967	1	5
2	18.8			SPRE				Dry	Cycl	80	1957	2	
3	12.5			SPRE				Dry	Cycl	80	1955	1	
4	15.6			SPRE				Dry	Cycl	80	1947	2	
	54.4	25	1.76		34	-	66						
					des. s. coal/gas								

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: ILLINOIS

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT 10^{12} $\frac{BTU}{yr}$	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANS. DISTANCE Miles
PEORIA SMSA Cont'd.													
2. Wallace													
Central Illinois Light Co.													
Boiler 1	22.2			GFRO				DRY	None	-	1925	4	5
2				GFRO				DRY	-	-	1925		
3	22.2			GFRO				DRY	-	-	1925	4	
4				GFRO				DRY	-	-	1925		
5	25			GFRO/ PCFR				DRY	CYCL	85	1939	5	
6	40.2			GFRO/ PCFR				DRY	CYCL	85	1941	8	
7	40.2			PCFR				DRY	E	95 (a)	1949	8	
8	55.9			PCFR				DRY	E	95 (a)	1949	17	
9				PCFR				DRY	E	96 (a)	1952		
10	113.6			PCFR				DRY	E	97 (a)	1958	230	
	349.4	45	16.74		71	-	29						
					des.p.coal		gas						
11. Powerton													
Commonwealth Edison													
Boiler 1	55			PCFR	100	-	-	DRY	None	-	1928	9	5
2	55			PCFR	100	-	-	WET	"	-	1929	9	
3	105			PCFR	100	-	-	WET	"	-	1930	18	
4	105			PCFR	100	-	-	WET	"	-	1940	18	
	320	31	13.05		100	-	-						
					des.p.coal								
AREA TOTAL	1139.8		54.03										

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: ILLINOIS

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} $\frac{BTU}{yr}$	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU %			BOTTOM ASH HANDLING	AIR POLLUTION CONTROL		INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANS. DISTANCE Miles
					COAL	OIL	GAS		TYPE	EFF. %			
Fulton-Mason Counties													
20. Havana													
Illinois Power Company													
Boiler 1	Boilers 28.75 each *			PCTA			-	DRY	GRAV	15	1947- 1950	50	5
2				PCTA				DRY	GRAV	15		50	
3				PCTA				DRY	GRAV	15		50	
4				PCTA				DRY	GRAV	15		50	
5				PCTA				DRY	GRAV	15		50	
6				PCTA				DRY	GRAV	15		50	
7				PCTA				DRY	GRAV	15		50	
8				PCTA				DRY	GRAV	15		50	
	230	37	9.53		100 des.p.coal	-	-						
AREA TOTAL	230		9.53										
													Peoria 25
Springfield SMSA													
17. Lakeside													
Springfield Water Light & Power Dept.													
Boiler 1	All boilers in range 15-33			N.R.				N.R.	N.R.	-			
2				RFRO				-	SCTA	70	1938		<5
3				RFRO				-	SCTA	70	1939		
4				RFRO				-	SCTA	80	1945		
5				PCFR				DRY	C	96.8	1947		
6				PCFR				DRY	C	96.8	1951		
7				CYCL				WET	E	84.4	1961		
8				CYCL				WET	E	84.4	1965		
	146	32	5.25		100 des.p.coal	-	-					225	

* Boilers 2, 3, 4 were converted to oil during 1971 and can no longer burn coal. Bottom handling was "dry"

YEAR: 1971
STATE: ILLINOIS

REFUSE COMBUSTION FOR POWER GENERATION

SMSA-COUNTY/PLANT	RATED CAPACITY	LOAD FACTOR	ENERGY RQMT.	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU %			BOTTOM ASH HANDLING	AIR POLLUTION CONTROL		INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY"	TYPICAL TRANS. DISTANCE
	MW	%	10^{12} $\frac{BTU}{yr}$		COAL	OIL	GAS		TYPE	EFF. %		tons/day	Miles
Springfield SMSA Cont'd.													
18. Dallman													
Springfield Water Light & Power Dept.													
Boiler 31	80			CYCL	100	-	-	WET	MCAX/E	85/99	1968	[illegible]	<5
	80	74	6.03		100	-	-						
					des.p.coal								
10. Kincaid													
Commonwealth Edison													
Boiler 1	659.7			CYCL	100	-	-	WET	E	98(d)	1967	94	15
2	659.7			CYCL	100	-	-	WET	E	98(d)	1968	94	
	1319.4	34	60.60		100	-	-						
					des.p.coal								Springfield 45
AREA TOTAL	1545.4		71.88										
Morgan County													
6. Meredosia													
Central Illinois Public Service Company													
Boiler 1	28.75			PCTA				DRY	E	99.6(t)	1948	6	15
2	28.75			PCTA				DRY	E	98.8(t)	1948	6	
3	28.75			PCTA				DRY	E	99.4(t)	1949	6	
4	28.75			PCTA				DRY	E	99.4(t)	1949	6	
5	239.4			PCTA				DRY	E	90	1960	55	
	354.4	61	17.61		99	1	-						Champaign-Urbana 25
					des.p.coal								
AREA TOTAL	354.4		17.61										

REFUSE COMBUSTION FOR POWER GENERATION

YEAR:1971
STATE:ILLINOIS

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} BTU/yr	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANS. DISTANCE Miles
Lee County - Ogle County													
39 Rochelle (Ogle Co.) Rochelle Municip. Utilities.	12.7	51	0.67	*	72	-	28	*	*	*	-	- 25	<5
					des. coal/gas								
32. Dixon (Lee Co.) Comm. Edison													
Boiler 4	50			PCFR/GFRO				Wet	E	92(d)	1945	140	<5
5	69			PCFR/GFRO				Wet	E	95(d)	1953	200	
	119	66	8.15		74	-	26						
					des. p. coal/gas								Rockford 25 Chicago 80
AREA TOTAL	131.7		8.82										

* No FPC-67 filed.

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: ILLINOIS

SMSA-COUNTY/PLANT	RATED CAPACITY	LOAD FACTOR	ENERGY RQMT.	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU %			BOTTOM ASH HANDLING	AIR POLLUTION CONTROL		INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY"	TYPICAL TRANS. DISTANCE
	MW	%	10^{12} BTU/yr		COAL	OIL	GAS		TYPE	EFF. %		tons/day	Miles
Jackson County													
4. Grand Tower													
Central Illinois Public Service Co.													
Boiler 1 *	Each 8.6			OSTO	100	-	-	DRY	None	-	1924	1	10
2				OSTO	100	-	-	DRY		-	1924	1	
3				OSTO	100	-	-	DRY		-	1924	1	
4				OSTO	100	-	-	DRY		-	1924	1	
5				OSTO	100	-	-	DRY		-	1924	1	
6				OSTO	100	-	-	DRY		-	1924	1	
7	36.3			PCFR	100	-	-	DRY	E	98.5	1950	7	
8	36.3			PCFR	100	-	-	DRY	E	98.5	1950	7	
9	108.5			PCFR	100	-	-	DRY	E	97.1	1958	23	
	232.7	55	11.02		100	-	-						
					des.p.coal								
AREA TOTAL	232.7		11.02										St Louis 80
Massac County													
16. Joppa													
Electric Energy Inc.													
Boiler 1	183.4			PCTA				DRY	MCTA/E	80/98.5	1953	49	15
2 -	183.4			PCTA				DRY	MCTA/E	80/98.5	1953	49	
3	183.4			PCTA				DRY	MCTA/E	80/98.5	1954	49	
4	183.4			PCTA				DRY	MCTA/E	80/98.5	1954	49	
5	183.4			PCTA				DRY	MCTA/E	80/98.5	1955	49	
6	183.4			PCTA				DRY	MCTA/E	80/98.5	1955	49	
	1100.4	72	69.53		100	-	-						
					des.p.coal								
AREA TOTAL	1100.4		69.53										Marion 30

* Prorated to give plant total capacity.

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: ILLINOIS

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} BTU/yr	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANS. DISTANCE Miles
Montgomery County													
3. Coffeen													
Central Illinois Public Service Co.													
Boiler 1	330			CYCL	100	-	-	WET	E	99 (a)	1965	800	5
	330	63	18.80		100	-	-						
					des.p.coal								
AREA TOTAL	330		18.80										Springfield 40 St Louis 50
Crawford County													
5. Hutsonville													
Central Illinois Public Service Co.													
Boiler 1 *	Each 14.7			PCFR	100	-	-	DRY	None	-	1940	30	5
2				PCFR	100	-	-	DRY	"	-	1940	30	
3				PCFR	100	-	-	DRY	"	-	1941	30	
4				PCFR	100	-	-	DRY	"	-	1941	30	
5	70.6			PCFR	100	-	-	DRY	E	99.2(t)	1953	140	
6	70.6			PCFR	100	-	-	DRY	E	99.5(t)	1954	140	
	200	51	9.76		100	-	-						
					des.p.coal								
AREA TOTAL	200		9.76										Terre Haute, Ind. 30

* Prorated to give total plant capacity

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: ILLINOIS

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. $10^{12}\ \frac{BTU}{yr}$	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	 OIL	 GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	 EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANS. DISTANCE Miles
Vermillion County													
22. Vermilion													
Illinois Power Company													
Boiler 1	73.5			PCTA	100	-	-	DRY	MCAX	86	1955	1	7
2	108.8			PCTA	100	-	-	DRY	MCAX	87	1956	2	
	182.3	61	10.53		100 des.p.coal	-	-						
AREA TOTAL	182.3		10.53										
Williamson County													
19. Marion													
Southern Illinois Power Co.													
	99	63	54.94		100 des.p.coal	-	-	*	*	*	1963	29	5
AREA TOTAL	99		54.94										

NOTE: Plants 23 Wood River, Madison Co., Ill; 25 Venice, Ill; and 29 Baldwin, Ill. are included in St. Louis SMSA, Missouri

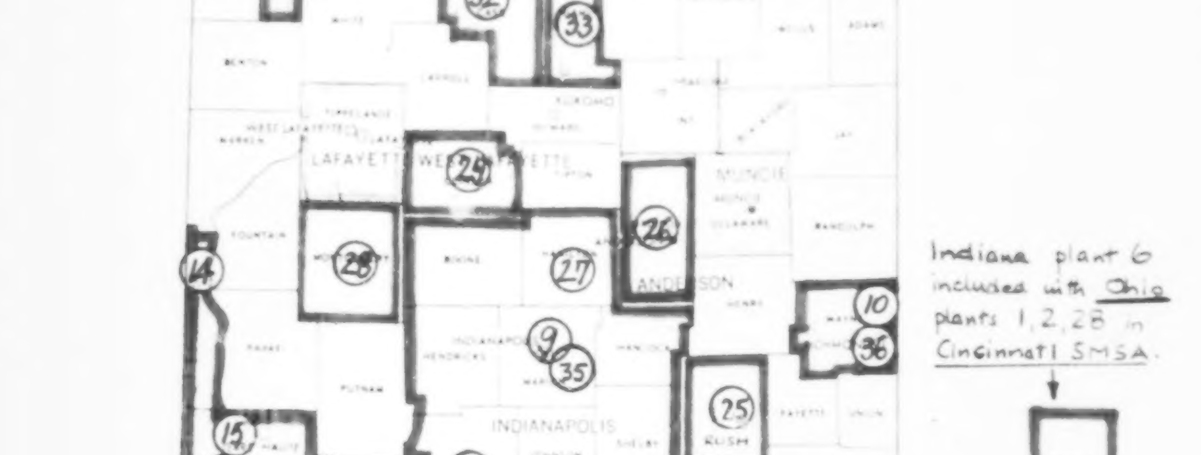
* No FPC-67 filed

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: ILLINOIS

SMSA-COUNTY/PLANT	RATED CAPACITY	LOAD FACTOR	ENERGY RQMT.	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU %			BOTTOM ASH HANDLING	AIR POLLUTION CONTROL		INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY"	TYPICAL TRANS. DISTANCE
	MW	%	10^{12} $\frac{BTU}{yr}$		COAL	OIL	GAS		TYPE	EFF. %		tons/day	Miles
Wabash County													
36. Mount Carmel Mount Carmel Public Utility*													
Boiler	20.5	36	0.9	*	100 des. s. coal	-	-	*	*	*	-	3	< 5
AREA TOTAL	20.5		0.9										
Wayne County													
34. Fairfield Fairfield Munic. Util.	12.5	32	0.49	*	100 des. coal	-	-	*	*	*	-	2	< 5
AREA TOTAL	12.5		0.49										

* No FPC-67 filed


GARY-HAMMOND-EAST CHICAGO
SOUTH BEND
FORT WAYNE
LAFAYETTE-WEST LAFAYETTE
KOKOMO
MUNCIE
ANDERSON
INDIANAPOLIS
TERRE HAUTE
BLOOMINGTON
COLUMBUS
CINCINNATI
LOUISVILLE
EVANSVILLE
PLANTS:
EXISTING 1971
IN OPERATION BY 1975
"REFUSE GENERATION" AREAS
SCALE
0 10 20 30 40 50 MILES
Standard Metropolitan Statistical Areas (SMSA's)

Indiana plant 6 included with Ohio plants 1, 2, 28 in Cincinnati SMSA.

Indiana plant 17 included with Ky. plants 7, 8, 14, 20 (not shown) under LOUISVILLE SMSA, Kentucky.

Ky. plants 1, 16 included in "Evansville, Indiana".

REFUSE COMBUSTION FOR POWER GENERATION
Indiana, 1971 - "Coal Plants" Only

AREA	RATED CAPACITY MW	(b) ENERGY RQMT. 10^{12} $\frac{\text{BTU}}{\text{yr}}$	AREA POP. millions	(a) REFUSE GENERATION 10^6 $\frac{\text{tons}}{\text{yr}}$	10^{12} $\frac{\text{BTU}}{\text{yr}}$	POTENTIAL ENERGY SUPPLY FROM REFUSE (a/b %)	TYPICAL TRANS. DISTANCE Miles
Anderson SMSA	19.0	neg.	0.140	0.09	0.83	-	5
Evansville SMSA (incl. Spencer County)	787.2	49.2	0.255	0.16	1.51	3.1	8
Fort Wayne SMSA	20.0	1.1	0.286	0.18	1.69	146.9	<5
Gary-Hammond-East Chicago SMSA	2117.0	110.6	0.643	0.42	3.80	3.4	<5
Indianapolis SMSA	939.5	32.1	1.132	0.74	6.69	20.8	14
South Bend SMSA	394.0	13.4	0.285	0.18	1.66	12.4	<5
Terre Haute SMSA	2084.6	94.8	0.177	0.11	1.05	1.1	14
Cass County	74.2	1.7	0.041	0.02	0.22	12.7	5
Clinton County	32.5	1.2	0.031	0.01	0.17	13.4	<5
Daviess County	18.0	0.4	0.027	0.01	0.14	30.4	<5
DuBois County	23.5	0.7	0.031	0.01	0.16	21.1	<5
Jefferson County	1303.6	88.1	0.027	0.01	0.14	1.7	<5
Knox County	133.0	8.5	0.042	0.02	0.22	2.6	15
LaPorte County	215.0	10.0	0.107	0.06	0.57	5.7	<5
Miami County	40.0	1.0	0.040	0.02	0.21	20.4	<5
Montgomery County	35.2	1.4	0.035	0.02	0.19	12.8	<5
Pike County	957.6	59.2	0.012	0.00	0.06	0.1	5
Rush County	8.3	neg.	0.021	0.01	0.11	-	<5
Wayne County	67.5	3.3	0.080	0.04	0.43	13.0	<5
INDIANA STATE TOTALS	9269.7	477.6	3.412	2.20	19.9	4.2	

Includes all plants capable* of burning coal (design fuel and/or current fuel). Includes all plants in attached data sheets

* Does not differentiate between types of firing--assumes all types capable of refuse burning.

REFUSE COMBUSTION FOR POWER GENERATION - Identical to table above
Indiana, 1971- All Fossil Fuel Plants

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: INDIANA

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} BTU/yr	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANS. DIST. Miles
Jefferson County													
4. Clifty Creek (Indiana - Kentucky Electric Co.)													
Boiler 1				PCFR	100	-	-	WET	C	96.1	1955		
2				PCFR	100	-	-	WET	C	96.1	1955		<5
3				PCFR	100	-	-	WET	C	96.1	1955		
4				PCFR	100	-	-	WET	C	96.1	1955		Louisville, Ky 40
5				PCFR	100	-	-	WET	C	96.1	1955		
6				PCFR	100	-	-	WET	C	96.1	1956		
	1303.6	82	88.19		100	-	-						
					des. p. coal								
AREA TOTAL	1303.6		88.19									375	

NOTE: Plant (No. 6) Tanners Creek, is included in Ohio data, Cincinatti SMSA.
Plant (No. 17) Gallacher, is included in Kentucky data, Louisville SMSA.

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: INDIANA

SMSA-COUNTY/PLANT	RATED CAPACITY	LOAD FACTOR	ENERGY RQMT.	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU %			BOTTOM ASH HANDLING	AIR POLLUTION CONTROL		INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY"	TYPICAL TRANS. DISTANCE
	MW	%	10^{12} BTU/yr		COAL	OIL	GAS		TYPE	EFF. %		tons/day	Miles
DuBois County													
30. Huntingsburg ** (Huntingsburg Muni. Light & Power)	2.0		neg.		100 des. s. coal	-	-	*	*	*			<5
													Evansville 45 Louisville, Ky 65
31. Jasper (Jasper Muni. Electric Util.)	21.5	33	0.76		100 des. s. coal	-	-	*	*	*		30	<5
AREA TOTAL	23.5		0.76										
Pike County													
8. Petersburg (Indianapolis Power & Light)													
Boiler 1	261.7			PCTA	100	-	-	DRY	C	97	1967	670	5
2	462.7			PCTA	100	-	-	DRY	E	90	1969	1185	
	724.4	70	44.09		100 des. p. coal	- oil	-						
24. Ratts (Indiana Statewide Elec. Corp.)													
Boiler 1					100	-	-				1969		5
2					100	-	-				1969		
	233.2	77	15.20		100 des p. coal	-	-					650	Evansville 40
AREA TOTAL	957.6		59.29										

* No form FPC-67 filed

** Standby

YEAR: 1971
STATE: INDIANA

REFUSE COMBUSTION FOR POWER GENERATION

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} $\frac{BTU}{yr}$	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANS. DISTANCE Miles
South Bend SMSA													
7. Twin Branch													
(Indiana & Michigan Elec. Co.)													
Boiler 1-1					100	-	-	DRY			1926		<5
1-2;1-3;1-4					100	-	-	DRY			1925		
2-1					100	-	-	DRY			1927		
2-2					100	-	-	DRY			1925		
2-3					100	-	-	DRY			1926		
2-4					100	-	-	DRY			1926		
3					100	-	-	WET	MCTA	25	1941		
4-1;4-2					100	-	-	WET	MCTA	25	1944		
5					100	-	-	WET	MCTA	50	1949		
	394	35	13.44		100 des.p. coal	-	-					575	
AREA TOTAL	394.0		13.44										
Evansville SMSA inc. Spencer County													
Ky 1. Robert Reid													
(Big Rivers Rural Elec. Coop)													
Boiler 1	80	74	5.86	PCFR	100 des. p. coal	-	-	DRY	C	99.5	1965	245	8
Ky 16. Henderson*													

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* Henderson (plant No. 16) in Sebree Co., Kentucky is not included in data for lack of information. Henderson Station No. 2 (Plant No. 16) in Sebree Co., Kentucky will be in operation by 1975 and will be so recorded.

YEAR: 1971
STATE: INDIANA

REFUSE COMBUSTION FOR POWER GENERATION

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. $10^{12}\ \frac{BTU}{yr}$	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANS. DISTANCE Miles
Evansville SMSA Cont'd.													
Spenser County													
2. Warrick													
(Alcoa Generating Co.)													8
Boiler 1					100	-	-			85			
2					100	-	-			85			
3				PCFR	100	-	-	DRY	MCAX	50 (t)	1965		
4					100	-	-	DRY	E	98	1970		
	432	65	26.30		100	-	-					1120	
					des. p. coal								
3. Ohio River													
(Southern Ind. Gas & Elec.)													
Boiler 1				SPRE				DRY	None	-	1929		<5
2				SPRE				DRY	None	-	1929		
3	32.5			SPRE				DRY	None	-	1935	90	
4				SPRE				DRY	None	-	1937		
5	20			PCFR				DRY	SCTA		1939	55	
6	23			PCFR				DRY	SCTA		1943	65	
7	23			PCFR				DRY	SCTA		1949	65	
8	23			PCFR				DRY	SCTA		1950	65	
	121.5	55*	8.19		3	15	82						
					des.	oil	gas						
22. Culley													
(Southern Ind. Gas & Elec.)													
Boiler 1	50			PCFR	100	-	-	WET	CYCL	85	1955	120	12
2	103.7			PCFR	100	-	-	WET	CYCL	85	1966	255	
	153.7	55*	8.89		100	-	-						
					des. p. coal								
AREA TOTAL	787.2		49.24										

* Based on State average.

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: INDIANA

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} BTU/yr	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANS. DISTANCE Miles
Gary-Hammond- East Chicago SMSA													
1. State Line (Commonw. Edison of Indiana)													
Boiler 1	208			PCFR				DRY/WET	E	98	1929	480	<5
2	150			PCFR				WET	E	12	1938	345	
3	225			PCTA/GTAN				WET	E	98	1955	520	
4	389			CYCL/GOPP				WET	E	98	1962	900	
	972	61	52.58		70 des.p. coal		30 gas						
11. Bailly (Northern Indiana Pub. Ser. Co.)													
Boiler 7	194			CYCL/GFRO				WET	E	98.5	1962	335	15
8	421.6			CYCL/GOPP				WET	E	98.1	1968	736	
	615.6	47	25.37		92 des. coal		8 gas						
12. Dean Mitchell (Northern Indiana Pub. Ser. Co.)													
Boiler 4	138.1			PCTA/GTAN				DRY	E	90	1956	360	<5
5	138.1			PCTA/GTAN				DRY	E	97	1959	360	
6	138.1			PCTA/GTAN				DRY	E	91	1959	360	
11	115.1			PCFR				DRY	E	93	1970	300	
	529.4	71	32.66		86 des.p. coal	-	14						
AREA TOTAL	2117.0		110.61										

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: INDIANA

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} BTU/yr	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANS. DISTANCE Miles
Anderson SMSA													
26. Anderson**													
(Anderson Municipal Light & Power)	19		neg.		100 es. s. coal	-	-	*	*	*		-	5
AREA TOTAL	19.0		-										
LaPorte County													
13. Michigan City (Northern Indiana Public Service Company)													
Boiler 1	75			PCFR	100	-	-	WET	E	NR	1931	145	≤5
2				PCFR	100	-	-	WET	E	NR	1931		
3				PCFR	100	-	-	WET	E	89.8	1931		Gary 25
4	140			CYCL/CFRO	100	-	-	WET	E	98	1950		South Bend 35
5				CYCL/GFRO	100	-	-	WET	E	98	1950	275	
6				CYCL/GFRO	100	-	-	WET	E	98	1951		
	215	44	10.04		100 es.p. coal	-	-						
AREA TOTAL	215.0		10.04										

* No FPC-67 filed

** Standby

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: INDIANA

SMSA-COUNTY/PLANT	RATED CAPACITY	LOAD FACTOR	ENERGY RQMT.	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU %			BOTTOM ASH HANDLING	AIR POLLUTION CONTROL		INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY"	TYPICAL TRANS. DISTANCE
	MW	%	10^{12} $\frac{BTU}{yr}$		COAL	OIL	GAS		TYPE	EFF. %		tons/day	Miles
Fort Wayne SMSA													
19. Lawton Park (Board of Public Utilities "Ft. Wayne")	20	55**	1.15		100 des. s. coal	-	-	*	*	*	-	50	<5
AREA TOTAL	20.0		1.15										
Cass County													
32. Logansport (Logansport Municipal Utilities)	74.2	22	1.73		72 des. s. coal	10	18	*	*	*	-	7	5 Lafayette 40
AREA TOTAL	74.2		1.73										
Miami County													
33. Peru (Peru Electric & Power Plant)	40	25	1.03		100 des. p. coal	-	-	*	*	*	-	45	<5 Indianapolis 70
AREA TOTAL	40		1.03										
Clinton County													
29 Frankfurt	32.5	37	1.27		89 des. s. coal	11	-	*	*	*	-	50	<5 Lafayette 20
AREA TOTAL	32.5		1.27										

* No FPC-67 filed   ** State average

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: INDIANA

SMSA-COUNTY/PLANT	RATED CAPACITY	LOAD FACTOR	ENERGY RQMT.	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU %			BOTTOM ASH HANDLING	AIR POLLUTION CONTROL		INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY"	TYPICAL TRANS. DISTANCE
	MW	%	$10^{12}\ \frac{BTU}{yr}$		COAL	OIL	GAS		TYPE	EFF. %		tons/day	MILES
MONTGOMERY COUNTY													
28. CRAWFORDSVILLE Crawfordsville Municipal Light & Power Company													
Boiler	35.2	40	1.48		100	-	-	*	*	*		60	<5
					des. s-coal								Indianapolis 50
AREA TOTAL:	35.2		1.48										

* No FPC-67 Filed

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: INDIANA

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} $\frac{BTU}{yr}$	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANS. DISTANCE Miles
Indianapolis SMSA													
9. Stout													< 5
(Indianapolis Power & Light Co.)													
Boiler 1				OSTO				DRY	None		1931		
2				OSTO				DRY	"		1931		
3				OSTO				DRY	"		1931		
4				OSTO				DRY	"		1931		
5				OSTO				DRY	"		1931		
6				OSTO				DRY	"		1931		
7				OSTO				DRY	"		1931		
8				OSTO				DRY	"		1931		
9				PCTA				WET	MCTA	66	1942		
10				PCTA				WET	MCTA	66	1947		
50				PCTA				DRY	C	99	1958		
60				PCTA				DRY	MCTA	80	1961		
	383.8	38	13.59		97	3	-						
					des.p.	coal	oil					575	
23. Pritchard													
(Indianapolis Power & Light Co.)													
Boiler 1	46			PCTA	100	-	-	WET	MCTA	75	1949	65	25
2	46			PCTA	100	-	-	WET	MCTA	75	1950	65	
3	50			PCTA	100	-	-	WET	MCTA	75	1941	75	
4	69			PCTA	100	-	-	DRY	MCTA	75	1953	100	
5	69			PCTA	100	-	-	DRY	C	99.5 (t)	1953	100	
6	113.6			PCTA	100	-	-	DRY	E	99.5 (t)	1956	170	
	396.6	35	14.13		100	-	-						
					des.p.	coal	oil						

YEAR: 1971
STATE: INDIANA

REFUSE COMBUSTION FOR POWER GENERATION

SMSA-COUNTY/PLANT		RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} BTU/yr	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANS. DISTANCE MILES
INDIANAPOLIS SMSA (Cont'd.)														
35. PERRY K & W Indiana Power and Light														
Boiler	11				PCFR	100	-	-	Dry	E	97	1938		<5
	12				PCFR	100	-	-	Dry	E	97	1938		
	13				PCFR	100	-	-	Dry	E	90	1946		
	14				PCFR	100	-	-	Dry	E	90	1947		
	15				SPRE	100	-	-	Dry	MCTA	92.5	1953		
	16				SPRE	100	-	-	Dry	MCTA	92.5	1953		
	6				OSTO	100	-	-	Dry	None	-	1923		
	7				OSTO	100	-	-	Dry	None	-	1923		
	8				OSTO	100	-	-	Dry	None	-	1924		
	9				OSTO	100	-	-	Dry	None	-	1924		
	10				OSTO	100	-	-	Dry	None	-	1924		
		59.1	14	1.23		100	-	-					50	

des. s.and p.coal/oil

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: INDIANA

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} BTU/yr	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANS. DISTANCE Miles
Indianapolis SMSA cont'd													
27. Noblesville (Public Service Co. of Indiana)													
Boiler 1	33.3			PCFR				DRY	E	98	1950	45	17
2	33.3			PCFR				DRY	E	98	1950	45	
3	33.3			PCFR				DRY	E	98	1950	45	
	100	28	3.21		99 des.p. coal	1	-						
AREA TOTAL	939.5		32.16										
Wayne County													
10. Whitewater Valley (Richmond Munic. Lighting & Power)													
Boiler 1	37.5	82	3.31		100 des.p. coal	-	-	*	*	*	1955	140	<5
36. Johnson St.** (Richmond Munic. Lighting & Power)	30	-	neg.		100 des.s. coal	-	-	*	*	*		—	<5
AREA TOTAL	67.5		3.31										Dayton, Ohio 30 Indianapolis 70
Rush County													
25. Rushville (Public Service Co. of Indiana)	8.3		neg.		100 des.s. coal	-	-	*	*	*		—	<5
AREA TOTAL	8.3		-										

* No FPC-67 filed
**Standby

YEAR: 1971
STATE: INDIANA

REFUSE COMBUSTION FOR POWER GENERATION

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} $\frac{BTU}{yr}$	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANS. DISTANCE Miles
Terre Haute SMSA													
5. Breed (Indiana and Michigan Elec. Co) Boiler 1	495.6	46	18.93	CYCL	100 des.p. coal	-	-	WET	CYCL	NA	1960	810	30
14. Cayuga (Public Service Co. of Ind.) Boiler 1	531	47	21.02	PCTA	100 des.p. coal	-	-	DRY	E	97	1970	900	35
15. Dresser (Public Service Co. of Indiana) Boiler 9*				SPRE				DRY			1937		<5
4-1				PCFR				WET			1941		
4-2				PCFR				WET			1941		
5-1				PCFR				WET			1944		
5-2				PCFR				WET			1944		
6-1				PCFR				WET			1945		
6-2				PCFR				WET			1945		
7-1				PCFR				WET			1948		
	150	35	6.24		97 des. p. coal	3	-					265	

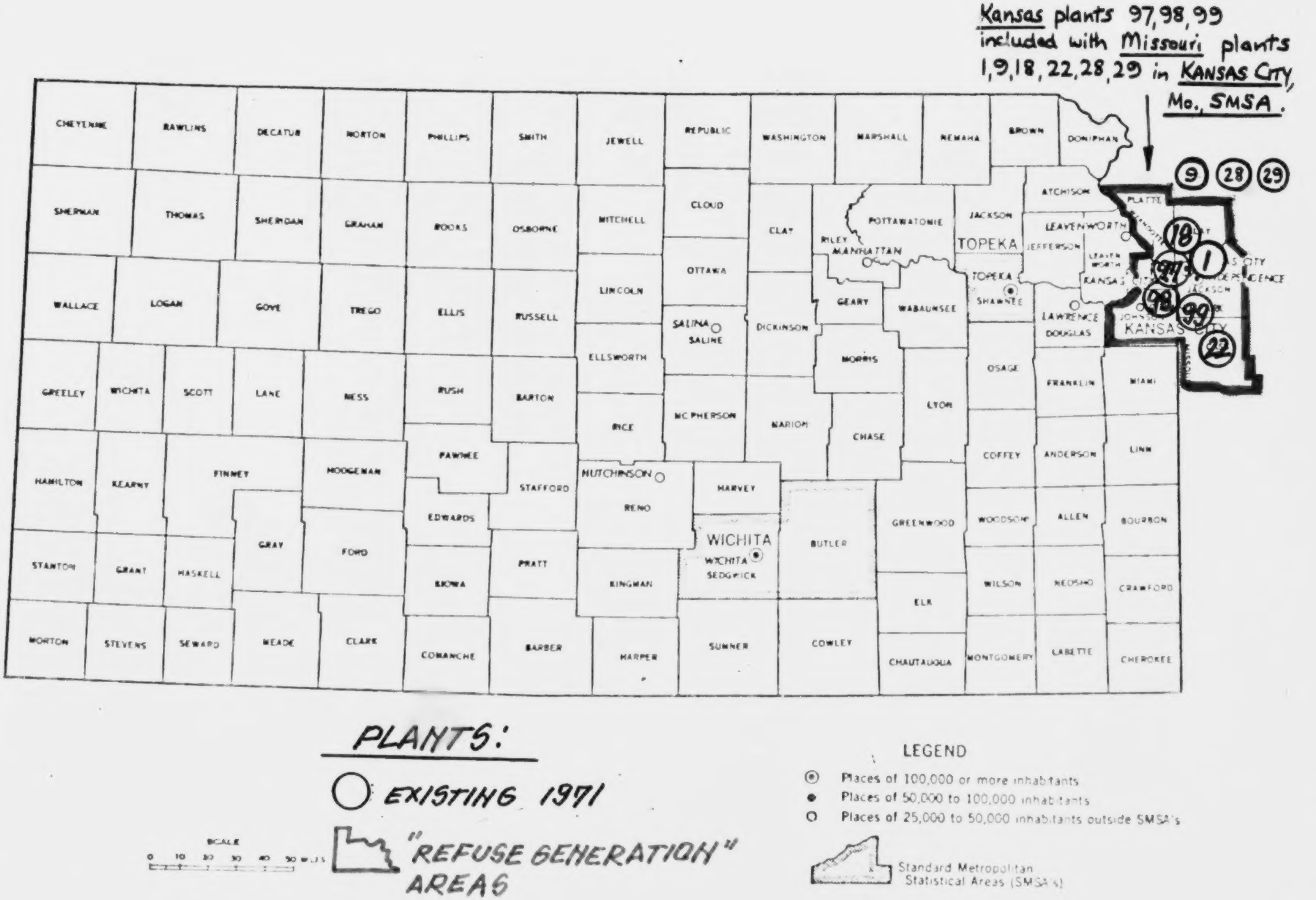
* Retired in 1971: not included in totals (was 60 MW).

REFUSE COMBUSTION FOR POWER GEN[illegible]ION

YEAR: 1971
STATE: INDIANA

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} $\frac{BTU}{yr}$	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANS. DISTANCE Miles
Terre Haute SMSA Cont'd.													
18. Wabash River													
(Public Service Co. of Indiana)													
Boiler 1				PCFR				DRY	E	98.5	1953		<5
2				PCFR				DRY	E	98.5	1953		
3				PCFR				DRY	E	98.5	1954		
4				PCFR				DRY	E	98.5	1954		
5				PCFR				DRY	E	98.5	1956		
6				PCTA				DRY	E	98.5	1968		
	908	55	48.70		99 des.p. coal	1						1890	
AREA TOTAL	2084.6		94.89										
Knox County													
16. Edwards Port													15
(Public Service Co. of Indiana)													Terre Haute 45
Boiler 6-1				PCFR				COMB.			1944		
7-1	**			PCFR				DRY			1949		
7-2				PCFR				DRY			1949		
8-1				PCFR				DRY	MCTA	70	1951		
-	133	55	8.55		99 des.p. coal	1	-					365	
AREA TOTAL	133		8.55										
Daviess County													
34. Washington													
(Washington Lighting & Power Co.)	18	24	0.46		100 des.p.coal			*	*	*		15	5
AREA TOTAL	13		0.46										Evansville 50

** No breakdown , common steam header. * No FPC-67 filed.



Kansas plants 97, 98, 99 included with Missouri plants 1, 9, 18, 22, 28, 29 in Kansas City, Mo., SMSA.

PLANTS:

○ EXISTING 1971

"REFUSE GENERATION" AREAS

LEGEND
⊙ Places of 100,000 or more inhabitants
● Places of 50,000 to 100,000 inhabitants
○ Places of 25,000 to 50,000 inhabitants outside SMSA's
Standard Metropolitan Statistical Areas (SMSA's)
SCALE
0 10 20 30 40 50 MILES
9
28
29
18
1
97
98
99
22
TOPEKA
WICHITA
KANSAS CITY
MANHATTAN
SALINA
HUTCHINSON
LAWRENCE
LEAVENWORTH
INDEPENDENCE
CHEYENNE
RAWLINS
DECATUR
NORTON
PHILLIPS
SMITH
JEWELL
REPUBLIC
WASHINGTON
MARSHALL
NEMAHA
BROWN
DONIPHAN
SHERMAN
THOMAS
SHERIDAN
GRAHAM
ROOKS
OSBORNE
MITCHELL
CLOUD
CLAY
RILEY
POTTAWATOMIE
JACKSON
ATCHISON
LEAVENWORTH
JEFFERSON
WYANDOTTE
PLATTE
CLAY
JACKSON
JOHNSON
WALLACE
LOGAN
GOVE
TREGO
ELLIS
RUSSELL
LINCOLN
OTTAWA
SALINE
DICKINSON
GEARY
WABAUNSEE
SHAWNEE
DOUGLAS
GREELEY
WICHITA
SCOTT
LANE
NESS
RUSH
BARTON
ELLSWORTH
RICE
McPHERSON
MARION
MORRIS
CHASE
LYON
OSAGE
FRANKLIN
MIAMI
HAMILTON
KEARNY
FINNEY
HODGEMAN
PAWNEE
STAFFORD
RENO
HARVEY
COFFEY
ANDERSON
LINN
EDWARDS
GREENWOOD
WOODSON
ALLEN
BOURBON
STANTON
GRANT
HASKELL
GRAY
FORD
KIOWA
PRATT
KINGMAN
SEDGWICK
BUTLER
WILSON
NEOSHO
CRAWFORD
ELK
MORTON
STEVENS
SEWARD
MEADE
CLARK
COMANCHE
BARBER
HARPER
SUMNER
COWLEY
CHAUTAUQUA
MONTGOMERY
LABETTE
CHEROKEE
MISSOURI

REFUSE COMBUSTION FOR POWER GENERATION

Kansas,1971 - Kansas City SMSA

AREA	RATED CAPACITY MW	(b) ENERGY RQMT. $10^{12}\ \frac{BTU}{yr}$	AREA POP. millions	(a) REFUSE GENERATION $10^6\ \frac{tons}{yr}$	(a) REFUSE GENERATION $10^{12}\ \frac{BTU}{yr}$	POTENTIAL ENERGY SUPPLY FROM REFUSE (a/b %)	TYPICAL TRANS. DISTANCE miles
All Fossil Fuel Plants							
Kansas City SMSA	2395.8	91.3	1.283	0.84	7.60	8.3	<5

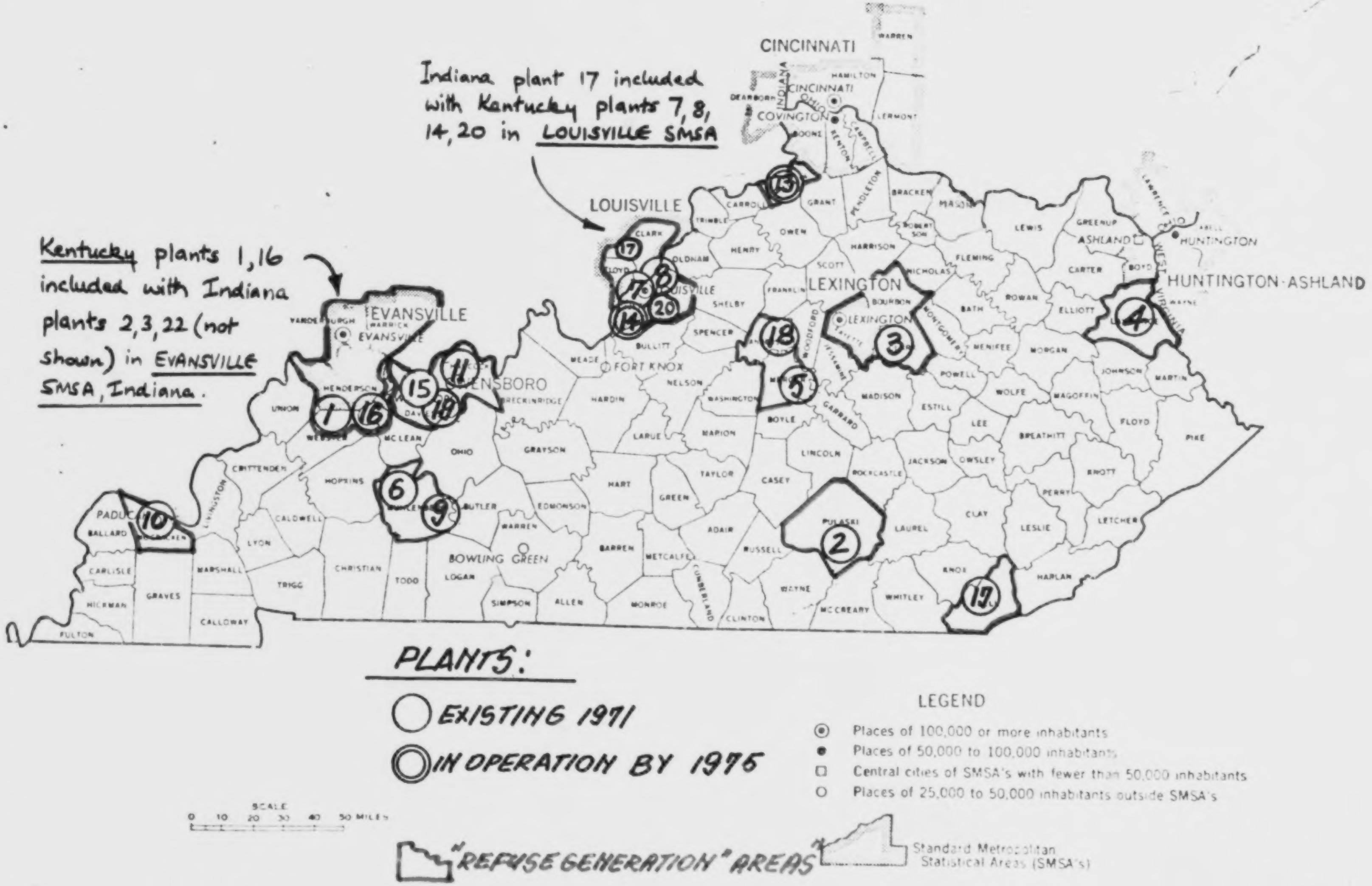
NOTE: All Kansas City Plants are included in Missouri under "Kansas City SMSA".

AREA	RATED CAPACITY MW	(b) ENERGY RQMT. $10^{12}\ \frac{BTU}{yr}$	AREA POP. millions	(a) REFUSE GENERATION $10^6\ \frac{tons}{yr}$	(a) REFUSE GENERATION $10^{12}\ \frac{BTU}{yr}$	POTENTIAL ENERGY SUPPLY FROM REFUSE (a/b %)	TYPICAL TRANS. DISTANCE miles
"Coal Plants" only**							
Kansas City SMSA	2262.8	89.3	1.283	0.84	7.60	8.5	<5

Includes all plants capable* of burning coal (design fuel and/or current fuel).

* Does not differentiate between types of firing -- assumes all types capable of refuse burning.

** Includes all plants in the Data Tables except 29.


Indiana plant 17 included with Kentucky plants 7, 8, 14, 20 in LOUISVILLE SMSA
Kentucky plants 1, 16 included with Indiana plants 2, 3, 22 (not shown) in EVANSVILLE SMSA, Indiana.
CINCINNATI
CINCINNATI
COVINGTON
INDIANA
OHIO
LOUISVILLE
LEXINGTON
EVANSVILLE
HUNTINGTON-ASHLAND
HUNTINGTON
ASHLAND
WEST VIRGINIA
FORT KNOX
BOWLING GREEN
PADUCAH
1
2
3
4
5
6
7
8
9
10
11
13
14
15
16
17
18
19
20
PLANTS:
EXISTING 1971
IN OPERATION BY 1976
"REFUSE GENERATION" AREAS
LEGEND
Places of 100,000 or more inhabitants
Places of 50,000 to 100,000 inhabitants
Central cities of SMSA's with fewer than 50,000 inhabitants
Places of 25,000 to 50,000 inhabitants outside SMSA's
Standard Metropolitan Statistical Areas (SMSA's)
SCALE
0 10 20 30 40 50 MILES

REFUSE COMBUSTION FOR POWER GENERATION
Kentucky, 1971 - "Coal Plants" Only

AREA	RATED CAPACITY MW	(b) ENERGY RQMT. 10^{12} $\frac{BTU}{yr}$	AREA POP. millions	(a) REFUSE GENERATION 10^6 $\frac{tons}{yr}$	(a) REFUSE GENERATION 10^{12} $\frac{BTU}{yr}$	POTENTIAL ENERGY SUPPLY FROM REFUSE (a/b %)	TYPICAL TRANS. DISTANCE miles
Lexington SMSA (incl. Bourbon Co. & Clark Co.)	196	5.8	0.221	0.14	1.31	22.6	17
Louisville SMSA	2004.1	97.1	0.842	0.55	4.98	5.1	<5
Owensboro SMSA (incl. Hancock Co.)	543.5	32.5	0.087	0.05	0.51	1.6	17
Anderson-Mercer Counties	859.1	30.2	0.026	0.01	0.14	0.5	8
Bell County	37.5	1.0	0.032	0.01	0.17	15.7	<5
Lawrence County	1096.8	57.7	0.011	0.00	0.06	0.1	<5
McCracken County	1750.0	102.2	0.059	0.03	0.31	0.3	<5
Muhlenberg County	2821.2	137.1	0.028	0.01	0.15	0.1	<5
Pulaski County	344.0	17.4	0.036	0.02	0.19	1.1	5
KENTUCKY STATE TOTALS	9652.2	481.5	1.342	0.86	7.82	1.6	

Includes all plants capable* of burning coal (design fuel and/or current fuel). Includes all plants in attached data sheets.

* Does not differentiate between types of firing--assumes all types capable of refuse burning.

REFUSE COMBUSTION FOR POWER GENERATION -- Identical to table above.
Kentucky, 1971 - All Fossil Fuel Plants

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: KENTUCKY

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} $\frac{BTU}{yr}$	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANS. DISTANCE miles
McCracken County													
10. Shawnee Tennessee Valley Authority													
Boiler 1	Each 175			*	100	-	-	Dry	MCTA/E	60/94	1953	435	<5
2				*	100	-	-	Dry	MCTA/E	60/94	1953	435	
3				*	100	-	-	Dry	MCTA/E	60/94	1953	435	
4				*	100	-	-	Dry	MCTA/E	60/94	1954	435	
5				*	100	-	-	Dry	MCTA/E	60/94	1954	435	
6				*	100	-	-	Dry	MCTA/E	60/94	1954	435	
7				*	100	-	-	Dry	MCTA/E	60/94	1954	435	
8				*	100	-	-	Dry	MCTA/E	60/94	1955	435	
9				*	100	-	-	Dry	MCTA/E	60/94	1955	435	
10				*	100	-	-	Dry	MCTA/E	60/94	1956	435	
	1750	68	102.28		100	-	-						
					des.p-coal								Owensboro 95
AREA TOTAL	1750		102.28										
Pulaski County													
2. Cooper East Kentucky Rural Electric Coop.													
Boiler 1	113.6			PCFR	100	-	-	Dry	MCTA	86(t)	1965	245	5
2	230.4			PCFR	100	-	-	Dry	MCTA	90(t)	1969	495	
	344.0	57	17.46		100	-	-						
					des.coal								
AREA TOTAL	344.0		17.46										Knoxville,Tenn 80

* P-coal circular firing

NOTE: Plants No. 1 (Robert Reid, Henderson Co., KY) and No. 16 (Henderson, Henderson Co., KY) are included in Evansville SMSA, Indiana. See Indiana.

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: KENTUCKY

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} $\frac{BTU}{yr}$	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANS. DISTANCE miles
Muhlenberg County													
6. Green River Kentucky Utilities Company													
Boiler 1	75			PCFR	100	-	-	Dry	MCTA	80	1950	180	< 5
2	75			PCFR	100	-	-	Dry	MCTA	80	1950	180	
3	75			PCFR	100	-	-	Dry	MCTA	80	1950	180	
4	75			PCFR	100	-	-	Dry	MCTA	80	1954	180	
5	113			PCFR	100	-	-	Dry	MCTA	80	1959	270	
	263	53	14.81		100 des.p-coal	-	-						
9. Paradise TVA													
Boiler 1	678.6			CYCL	100	-	-	Wet	E	95	1963	1385	< 5
2	678.6			CYCL	100	-	-	Wet	E	95	1963	1385	
3	1201.0			CYCL	100	-	-	Wet	E	95	1969	2455	
	2558.2	58	122.30		100 des.coal	-	-					-	Owensboro 35 Nashville, Tenn 80
AREA TOTAL	2821.2		137.11										
Lawrence County													
4. Big Sandy Kentucky Power Company													
Boiler 1	265			PCFR				Dry	None	-	1963	590	< 5
2	831.8			PCFR				Dry	E	75	1969	1855	
	1096.8	66	57.78		98 des.p-coal	2	-						
AREA TOTAL	1096.8		57.78										Huntington 20

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: KENTUCKY

SMSA-COUNTY/PLANT	RATED CAPACITY	LOAD FACTOR	ENERGY RQMT.	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU %			BOTTOM ASH HANDLING	AIR POLLUTION CONTROL		INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY"	TYPICAL TRANS. DISTANCE
	MW	%	10^{12} $\frac{BTU}{yr}$		COAL	OIL	GAS		TYPE	EFF. %		tons/day	miles
Lexington SMSA													
Clark County													
3. Dale													
East Kentucky Rural Electric Coop.													
Boiler 1	24.5			PCFR	100	-	-	Dry	MCTA	85	1954	30	17
2	24.5			PCFR	100	-	-	Dry	MCTA	85	1954	30	
3	73.5			PCFR	100	-	-	Dry	MCTA	85	1957	90	
4	73.5				100	-	-	Dry	MCTA	85	1960	90	
	196	29	5.80		100	-	-					-	
					des.p-coal								
AREA TOTAL	196		5.80										
Anderson-Mercer Counties													
18. Tyrone													
Kentucky Utilities Company													
Boiler 1	15			PCFR				Dry	Grav	20(d)	1947	15	8
2	15			PCFR				Dry	Grav	20(d)	1947	15	
3	15			PCFR				Dry	Grav	20(d)	1948	15	
4	15			PCFR				Dry	Grav	20(d)	1948	15	
5	75			PCFR				Dry	CYCL	81	1953	85	
	135	24	3.59		95	5	-						
					des.p-coal								

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: KENTUCKY

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} BTU/yr	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANS. DISTANCE miles
Anderson-Mercer Counties cont'd													
5. Brown Kentucky Utilities Company													
Boiler 1	113.7			PCFR	100	-	-	Dry	SCTA	80	1957	175	
2	179.5			PCFR	100	-	-	Dry	SCTA	80	1963	280	8
3	430.9			PCTA	100	-	-	Dry	E	90.56	1971	675	
	724.1	41	26.68		100 des.p-coal	-	-						
AREA TOTAL	859.1		30.27										Lexington 20 Louisville 60
Bell County													
17. Pineville Kentucky Utilities Company													
Boiler 6	37.5	23	1.08	PCFR	100 des.p-coal	-	-	Dry	Thermix Standard Tubular Dust Collector	81.7	1951	45	<5
AREA TOTAL	37.5		1.08										Knoxville, Tenn 50 Lexington 90

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: KENTUCKY

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} BTU/yr	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANS. DISTANCE Miles
Owensboro SMSA													
11. Coleman (Hancock Co.) Big River Rural Electric Coop.													
Boiler 1	170			PCFR				Dry	E	99.5	1969	455	18
2	170			PCFR				Dry	E	99.5	1970	455	
	340	74	21.45		97 des.p.coal	-	3						
19. Owensboro No. 1 Owensboro Municipal Utilities													
Boiler 1	7.5			PCFR				Dry	MCTA/E	70		10	<5
2	7.5			PCFR				Dry	MCTA/E	70		10	
3	7.5			PCFR				Dry	MCTA/E	70		10	
4	30.0			PCFR				Dry	MCTA/E	90		45	
	52.5	29	2.0		99 des.coal	1	-						
15. Elmer Smith Owensboro Municipal Utilities													
Boiler 1	151												
	151	67	9.11		100 des.coal	-	-	Wet	E	97	1971	390	<5
AREA TOTAL	543.5		32.56										

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: KENTUCKY

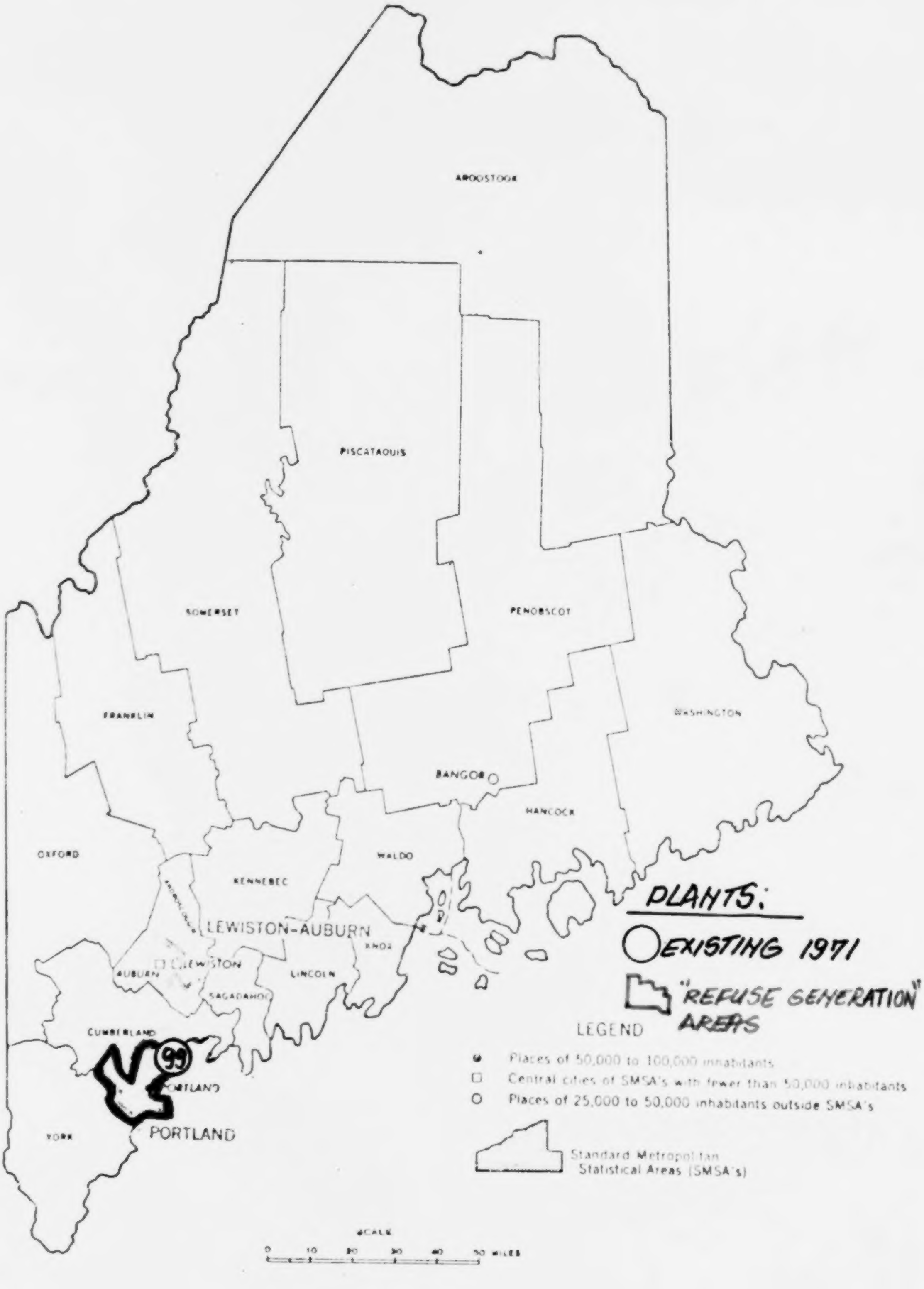
SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} BTU/yr	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANS. DISTANCE Miles
Louisville SMSA													
7. Cane Run Louisville Gas & Electric Co. Boiler 1	112.5			PCFR/ GFRO				Dry	E	98.8	1954	240	5
2	112.5			PCFR/ GFRO				Dry	E	98	1956	240	
3	147			PCFR/ GFRO				Dry	E	98	1958	315	
4	163.2			PCFR				Dry	E	98.5	1962	350	
5	209.4			PCFR				Dry	E	99.5	1966	450	
6	272			PCTA				Dry	E	99.4	1969	585	
	1016.6	57	51.81		88 des.p.coal/gas	-	12						
8. Paddy's Run Louisville Gas & Electric Co. Boiler 1	25			PCFR/ GFRO				Dry	E	96.5	1942	20	<5
2	25			PCFR/ GFRO				Dry	E	96.5	1942	20	
3	69			PCFR/ GFRO				Dry	E	98	1947	60	
4	69			PCFR/ GFRO				Dry	E	98	1949	60	
5	74.75			PCFR/ GFRO				Dry	E	98	1950	65	
6	74.75			PCFR				Dry	E	99.1	1952	65	
	337.5	18	7.16		61 des.p-coal/gas	-	39						
Ind 17. Gallagher (Floyd County, Indiana) Public Service Co. of Indiana Boiler 1	150			PCFR				Dry	E	99	1958	400	<5
2	150			PCFR				Dry	E	99	1959	400	
3	150			PCFR				Dry	E	99	1960	400	
4	150			PCFR				Dry	E	99	1961	400	
	600	70	38.04		99 des.p-coal	1	-						

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: KENTUCKY

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} BTU/yr	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANS. DISTANCE miles
Louisville SMSA cont'd													
20. Canal (standby) Louisville Gas & Electric Co.													
Boiler 1	25			PCFR/ GFRO				Dry	E	90	1937	–	<5
2	25			PCFR/ GFRO				Dry	E	96	1941	–	
	50	3.0	0.18		-	-	-						
					des.p-coal/gas								
AREA TOTAL	2004.1		97.19										

MAINE


AROOSTOOK
PISCATAQUIS
SOMERSET
PENOBSCOT
FRANKLIN
WASHINGTON
BANGOR
HANCOCK
OXFORD
KENNEBEC
WALDO
ANDROSCOGGIN
LEWISTON-AUBURN
KNOX
AUBURN
LEWISTON
LINCOLN
SAGADAHOC
CUMBERLAND
99
PORTLAND
PORTLAND
YORK
PLANTS:
○ EXISTING 1971
"REFUSE GENERATION" AREAS
LEGEND
● Places of 50,000 to 100,000 inhabitants
☐ Central cities of SMSA's with fewer than 50,000 inhabitants
○ Places of 25,000 to 50,000 inhabitants outside SMSA's
Standard Metropolitan Statistical Areas (SMSA's)
SCALE
0
10
20
30
40
50 MILES

REFUSE COMBUSTION FOR POWER GENERATION
Maine, 1971 - All Fossil Fuel Plants - Portland Only

AREA	RATED CAPACITY MW	(b) ENERGY RQMT. 10^{12} $\frac{BTU}{yr}$	AREA POP. millions	(a) REFUSE GENERATION 10^6 $\frac{tons}{yr}$	(a) REFUSE GENERATION 10^{12} $\frac{BTU}{yr}$	POTENTIAL ENERGY SUPPLY FROM REFUSE (a/b %)	TYPICAL TRANS. DISTANCE miles
Portland SMSA	213.6	14.5	0.197	0.12	1.16	8.0	10

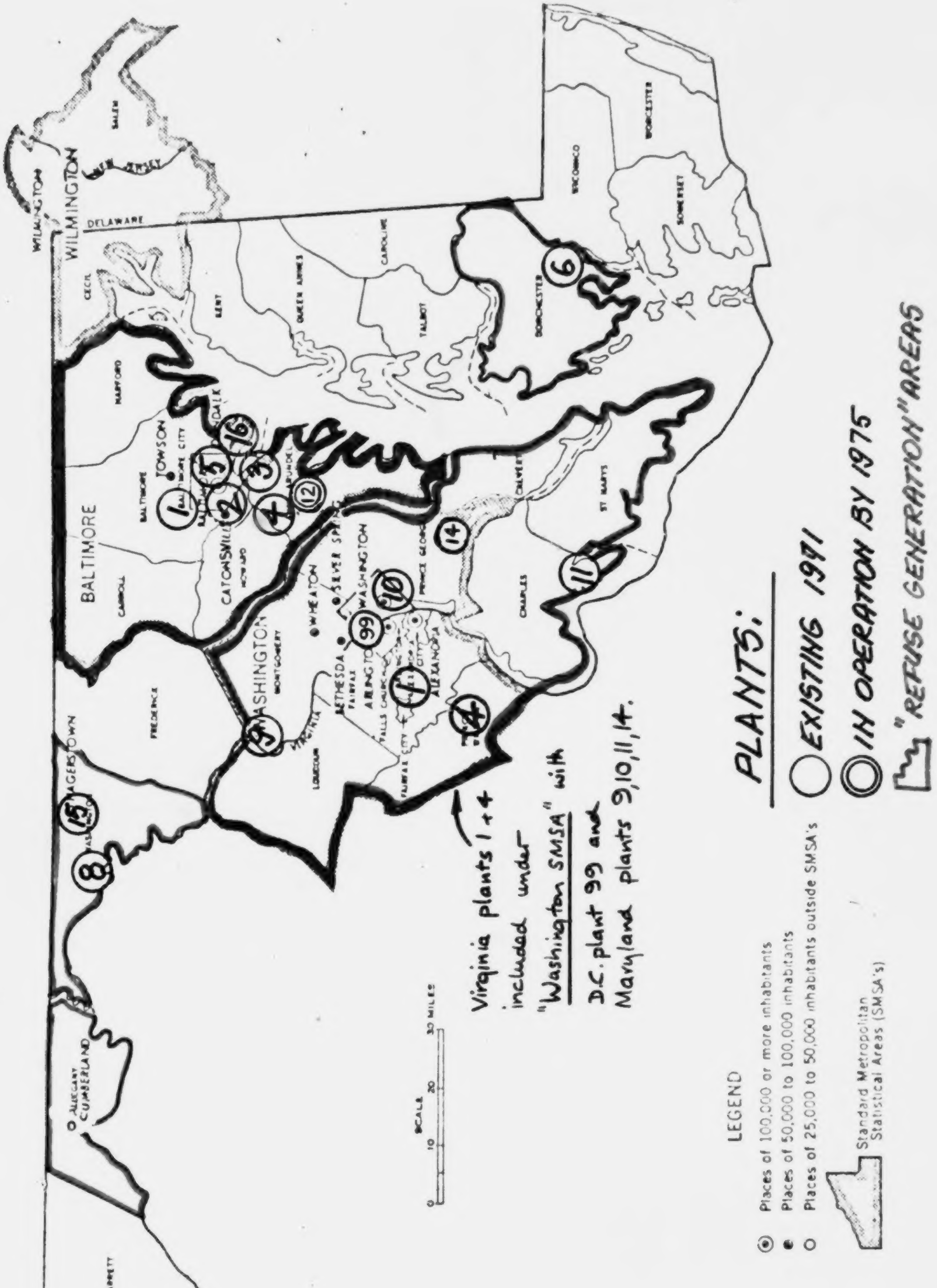
Includes one plant, as detailed in attached data sheet.
This plant is not capable of coal firing.

REFUSE COMBUSTION FOR POWER GENERATION
Maine, 1971 - "Coal Plants" Only -- None.

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: Maine

SMSA-COUNTY/PLANT	RATED CAPACITY	LOAD FACTOR	ENERGY RQMT.	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU %			BOTTOM ASH HANDLING	AIR POLLUTION CONTROL		INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY"	TYPICAL TRANS. DISTANCE
	MW	%	10^{12} BTU/yr		COAL	OIL	GAS		TYPE	EFF. %		tons/day	miles
Portland SMSA													
Wyman Central Maine Power Company Boiler 1	45			RFRO		100			GRAV/ MCTA	20-40	1957	129	10
2	45			RFRO		100			GRAV/ MCTA	20-40	1958	129	
3	123.6			RTAN		100			GRAV/ MCTA	20-40	1965	355	
	213.6	77	14.93		- des.	100 oil	-						
1971 AREA TOTAL	213.6		14.93										


WILMINGTON
DELAWARE
NEW JERSEY
SALEM
CECIL
KENT
QUEEN ANNES
CAROLINE
TALBOT
DORCHESTER
WICOMICO
WORCESTER
SOMERSET
HARFORD
BALTIMORE
TOWSON
BALTIMORE CITY
DUNDALK
ANNE ARUNDEL
CATONSVILLE
HOWARD
CARROLL
WASHINGTON
MONTGOMERY
WHEATON
SILVER SPRING
BETHESDA
ARLINGTON
FAIRFAX
FALLS CHURCH
ALEXANDRIA
PRINCE GEORGES
CALVERT
CHARLES
ST MARYS
FREDERICK
LOUDOUN
VIRGINIA
HAGERSTOWN
ALLEGANY
CUMBERLAND
GARRETT
1
2
3
4
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6
8
9
10
11
12
14
15
16
99
SCALE
0 10 20 30 MILES
LEGEND
⊙ Places of 100,000 or more inhabitants
● Places of 50,000 to 100,000 inhabitants
○ Places of 25,000 to 50,000 inhabitants outside SMSA's
Standard Metropolitan Statistical Areas (SMSA's)
PLANTS:
○ EXISTING 1971
◎ IN OPERATION BY 1975
"REFUSE GENERATION" AREAS

Virginia plants 1 + 4 included under "Washington SMSA" with D.C. plant 99 and Maryland plants 9,10,11,14.

REFUSE COMBUSTION FOR POWER GENERATION
Maryland, 1971 - "Coal Plants" Only

AREA	RATED CAPACITY MW	(b) ENERGY RQMT. $10^{12}\frac{BTU}{yr}$	AREA POP. millions	(a) REFUSE GENERATION $10^{6}\ \frac{tons}{yr}$	$10^{12}\frac{BTU}{yr}$	POTENTIAL ENERGY SUPPLY FROM REFUSE (a/b %)	TYPICAL TRANS. DISTANCE miles
Baltimore SMSA	1747.8	104.8	2.110	1.39	12.48	11.9	< 5
Washington SMSA (incl. Charles, Calvert, and St. Mary's Counties)	3388.6	251.0	3.040	1.99	17.98	7.2	26
Washington County	148.3	6.6	0.106	0.06	0.57	8.6	15
Dorchester County	256.6	6.8	0.030	0.01	0.16	2.3	10
MARYLAND STATE TOTALS	5541.3	369.4	5.290	3.47	31.19	8.4	

Includes all plants capable* of burning coal (design fuel and/or current fuel). Includes all plants in attached data sheets.

* Does not differentiate between types of firing -- assumes all types capable of refuse burning.

REFUSE COMBUSTION FOR POWER GENERATION
Maryland, 1971 - All Fossil Fuel Plants

-- **Identical** to table above.

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: Maryland

SMSA-COUNTY/PLANT	RATED CAPACITY	LOAD FACTOR	ENERGY RQMT.	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU %			BOTTOM ASH HANDLING	AIR POLLUTION CONTROL		INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY"	TYPICAL TRANS. DISTANCE
	MW	%	$10^{12}\ \frac{BTU}{yr}$		COAL	OIL	GAS		TYPE	EFF. %		tons/day	miles
Baltimore SMSA													
1. Crane Baltimore Gas & Electric													
Boiler 1	190.9			CYCL				Wet	E	70/63	1961	525	< 5
2	208.9			CYCL				Wet	E	70/55	1963	575	
	399.8	76	26.00		50 des.p.coal	50 oil	-						
2. Gould St. Baltimore Gas & Electric													
Boiler 1	35			PCFR				Dry	MCTA	63/60	1926	65	<5
2	35			PCFR				Dry	MCTA	63/60	1926	65	
3	103.5			PCFR				Dry	E	95/60	1952	190	
	173.5	40	8.57		28 des.	71 oil	1						
3. Riverside Baltimore Gas & Electric													
Boiler 1	60			PCFR				Dry	E	90/70	1942	160	<5
2	60			PCFR				Dry	E	85/70.7	1944	160	
3	60			PCFR				Dry	E	70	1948	160	
4	72			PCFR				Dry	MCTA	50	1951	190	
5	81.5			PCFR				Dry	MCTA	50	1953	215	
	333.5	51*	20.86		- des.	100 oil	-						

* State Average.

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: Maryland

SMSA-COUNTY/PLANT	RATED CAPACITY	LOAD FACTOR	ENERGY RQMT.	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU %			BOTTOM ASH HANDLING	AIR POLLUTION CONTROL		INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY"	TYPICAL TRANS. DISTANCE
	MW	%	10^{12} $\frac{BTU}{yr}$		COAL	OIL	GAS		TYPE	EFF. %		tons/day	miles
Baltimore SMSA cont'd													
4. Wagner													
Baltimore Gas & Electric													
Boiler 1	132			PCFR				Dry	C	95/73	1956	335	<5
2	136			PCFR				Dry	C	92/76	1959	345	
3	359			PCOP				Dry	E	98/NR	1966	915	
	627	70	37.66		98 des.p.coal	2							
5. Westport													
Baltimore Gas & Electric													
Boiler 1 ***	32.3			PCFR				Dry	E	77/65	1940	75	<5
2	32.3			PCFR				Dry	E	77/65	1940	75	
3	59.5			PCFR				Dry	E	93/80	1941	135	
4	69.9			PCFR				Dry	C	87/80	1950	160	
	194	45	10.52		1 des.	99 oil	-						
16. Pratt Street													
Baltimore Gas & Electric													
Boiler 1	20	51**	1.25		100 des.coal	-	-	*	*	*		50	<5
AREA TOTAL	1747.8		104.86										

* No FPC-67 filed.
** State Average.
*** Capacities prorated to give plant total.

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: Maryland

SMSA-COUNTY/PLANT	RATED CAPACITY	LOAD FACTOR	ENERGY RQMT.	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU %			BOTTOM ASH HANDLING	AIR POLLUTION CONTROL		INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY"	TYPICAL TRANS. DISTANCE
	MW	%	10^{12} $\frac{BTU}{yr}$		COAL	OIL	GAS		TYPE	EFF. %		tons/day	miles
Washington SMSA (incl. Charles, Calvert, St. Mary's Counties)													
Va 1. Potomac River, Va. Potomac Electric Co.													
Boiler 1	95.4			PCTA				Dry	MCAX/C	92 (t)	1949	215	26
2	95.4			PCTA				Dry	MCAX/C	96.1 (t)	1950	215	
3	108			PCTA				Dry	MCAX/C	94.6 (t)	1954	245	
4	108			PCTA				Dry	MCAX/C	93.5 (t)	1956	245	
5	108			PCTA				Dry	MCAX/C	93.6 (t)	1957	245	
	514.8	60	26.00		99 des.p.coal	1	-						
Va 4. Possum Point, Va. Virginia Electric & Power Co.													
Boiler 1	69			PCTA	-	100	-	Dry	E	72	1948	195	30
2	69			PCTA	-	100	-	Dry	E	72	1951	195	
3	113.6			PCTA	-	100	-	Dry	E	72	1955	325	
4	239.4			PCTA	-	100	-	Dry	E	72	1962	690	
	491	73	37.66		- des.p.coal	100 oil	-						

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: Maryland

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} $\frac{BTU}{yr}$	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANS. DISTANCE miles
Washington SMSA-Charles, Calvert & St. Mary's Counties cont'd													
9. Dickerson													
Potomac Electric Power Co.													
Boiler 1	195.5			PCTA				Dry	E	86.8	1959	405	
2	195.5			PCTA				Dry	E	95(t)	1960	405	30
3	195.5			PCTA				Dry	E	98.2(t)	1962	405	
	586.5	51**	28.82		92	8	-						
					des.p.coal								
10. Buzzards Point													
Potomac Electric Power Co.													
Boiler 1	33			PCFR				Wet	C	90	1933	80	<5
2	33			PCFR				Wet	C	90	1934	80	
3	51			PCTA				Wet	C	90	1940	125	
4	51			PCTA				Wet	C	90	1941	125	
5	51			PCTA/ RTAN				Dry	C	90	1943	125	
6	51			PCTA/ RTAN				Dry	C	90	1945	125	
	270	51**	15.68		40	60	-						
					des.	oil							
11. Morgantown													
Potomac Electric Power Co.													
Boiler 1	625.5			PCTA/ RTAN				Dry	E	99.5	1970	1840	40
2	625.5			PCTA/ RTAN				Dry	E	99.5	1971	1840	
	1251	84	83.23		21	79	-						
					des. p. coal, oil								

** State Average.

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: Maryland

SMSA-COUNTY/PLANT	RATED CAPACITY	LOAD FACTOR	ENERGY RQMT.	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU %			BOTTOM ASH HANDLING	AIR POLLUTION CONTROL		INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY"	TYPICAL TRANS. DISTANCE
	MW	%	10^{12} $\frac{BTU}{yr}$		COAL	OIL	GAS		TYPE	EFF. %		tons/day	miles
Washington SMSA-Charles, Calvert & St. Mary's Counties cont'd													
99. Benning													
Potomac Electric Power Co.													
Boiler 21	All below 7.5			RFRO				Dry	None	-	1918		5
23				RFRO				Dry	"	-	1918		
22				RFRO				Dry	"	-	1918		
24				RFRO				Dry	"	-	1918		
1				OSTO				Dry	"	-	1924		
3				OSTO				Dry	"	-	1924		
5				OSTO				Dry	MCAX	93	1927		
7				OSTO				Dry	MCAX	93	1927		
2				OSTO				Dry	None	-	1924		
4				OSTO				Dry	"	-	1924		
6				OSTO				Dry	MCAX	93	1927		
8				OSTO				Dry	MCAX	93	1927		
9				OSTO				Dry	MCAX	93	1929		
11				OSTO				Dry	MCAX	93	1929		
13				OSTO				Dry	MCAX	93	1929		
15				OSTO				Dry	MCAX	93	1929		
10				OSTO				Dry	MCAX	93	1929		
12				OSTO				Dry	MCAX	93	1929		
14				OSTO				Dry	MCAX	93	1929		
16				OSTO				Dry	MCAX	93	1947		
25	55			RFRO/ PCFR				Dry	E	96	1952	80	
26	88			RTAN/ PCTA				Dry	MCAX/C	89.2/ 74.6(t)	1968	130	
27	289			RTAN				Dry	None	-		430	
	553.5	31	27.49		24 des.p.coal	76 oil	-						

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: Maryland

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} BTU/yr	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANS. DISTANCE miles
Washington SMSA-Charles, Calvert & St. Mary's Counties cont'd													
14. Chalk Point													30
Potomac Electric Power Co.													
Boiler 1	363.8			PCOP				Dry	E	97.5	1964	685	
2	363.8			PCOP				Dry	E	97.5	1965	685	
	727.6	51	32.14		98 des.p.coal	2	-						
AREA TOTAL	3388.6		251.02										
Washington County													
8. Smith 1 & 2													15
Potomac Edison Co.													
1 (Boilers in range 16-91 MW)				OSTO	100	-	-	Dry	SCTA	50	1923		
3				OSTO	100	-	-	Dry	SCTA	50	1923		
5				OSTO	100	-	-	Dry	SCTA	50	1927		
7				OSTO	100	-	-	Dry	SCTA	50	1936		
9				PCFR	100	-	-	Dry	E	97.5	1947		
11				PCTA	100	-	-	Dry	E	99.7	1957		
	109.5	59	6.33		100 des.p.coal	-	-						

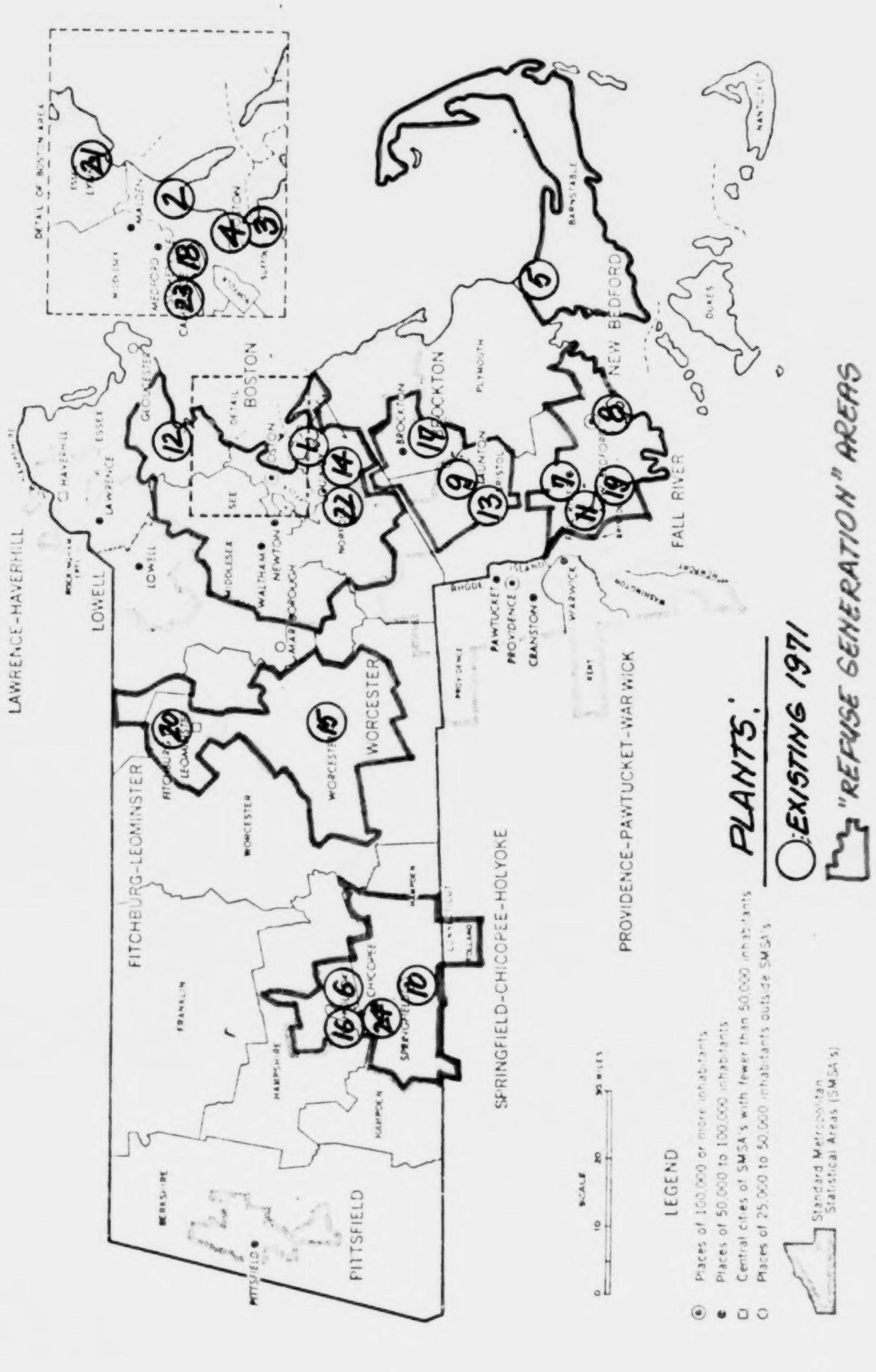
YEAR: 1971
STATE: Maryland

REFUSE COMBUSTION FOR POWER GENERATION

SMSA-COUNTY/PLANT	RATED CAPACITY	LOAD FACTOR	ENERGY RQMT.	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU %			BOTTOM ASH HANDLING	AIR POLLUTION CONTROL		INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY"	TYPICAL TRANS. DISTANCE
	MW	%	10^{12} $\frac{BTU}{yr}$		COAL	OIL	GAS		TYPE	EFF. %		tons/day	miles
Washington County con't													
15. Hagerstown (cold standby) Hagerstown Electric	38.8	7	0.33		48	52	-	*	*	*			
					des. p. coal	oil						10	5
AREA TOTAL	148.3		6.66										
Dorchester County													
6. Vienna** Delmarva Power & Light Co. Boiler 1	12			CYCL				None	None	-	1967	10	10
3	7.5			OSTO				Dry	GRAV	50	1941	5	
4	7.5			OSTO				Dry	MCTA	75	1945	5	
5	15			RFRO				Dry	MCTA	75	1947	15	
6	15			RFRO				Dry	MCAX	65	1949	15	
7	37.5			RFRO				Dry	MCAX	65	1951	40	
8	162			RTAN				Dry	MCAX	87.5	1971	180	
AREA TOTAL	256.5	19	6.88		88	12	-						
					des.s,p.coal								
					Boiler 1 - des oil								

* No FPC-67 filed.

** Units 1, 2,3,4 retired December 1972.
Units 5,6,7,8 are now oil fired (5,6,7 were PCFR)


LAWRENCE-HAVERHILL
LOWELL
FITCHBURG-LEOMINSTER
SPRINGFIELD-CHICOPEE-HOLYOKE
PROVIDENCE-PAWTUCKET-WARWICK
PITTSFIELD
WORCESTER
BOSTON
BROCKTON
NEW BEDFORD
FALL RIVER
DETAIL OF BOSTON AREA
SEE DETAIL BOSTON
HAVERHILL
LAWRENCE
ESSEX
GLOUCESTER
LOWELL
MIDDLESEX
WALTHAM
NEWTON
MARLBOROUGH
NORFOLK
PLYMOUTH
BRISTOL
TAUNTON
BROCKTON
BARNSTABLE
DUKES
NANTUCKET
RHODE ISLAND
PAWTUCKET
PROVIDENCE
CRANSTON
WARWICK
KENT
FITCHBURG
LEOMINSTER
WORCESTER
FRANKLIN
HAMPSHIRE
HAMPDEN
CHICOPEE
SPRINGFIELD
BERKSHIRE
PITTSFIELD
MEDFORD
MALDEN
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SCALE
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30 MILES
LEGEND
◉ Places of 100,000 or more inhabitants
● Places of 50,000 to 100,000 inhabitants
□ Central cities of SMSA's with fewer than 50,000 inhabitants
○ Places of 25,000 to 50,000 inhabitants outside SMSA's
Standard Metropolitan Statistical Areas (SMSA's)
PLANTS:
○: EXISTING 1971
"REFUSE GENERATION" AREAS

REFUSE COMBUSTION FOR POWER GENERATION
Massachusetts, 1971 - All Fossil Fuel Plants

AREA	RATED CAPACITY MW	(b) ENERGY RQMT. 10^{12} $\frac{\text{BTU}}{\text{yr}}$	AREA POP. millions	(a) REFUSE GENERATION 10^{6} $\frac{\text{tons}}{\text{yr}}$	(a) REFUSE GENERATION 10^{12} $\frac{\text{BTU}}{\text{yr}}$	POTENTIAL ENERGY SUPPLY FROM REFUSE (a/b %)	TYPICAL TRANS. DISTANCE miles
Boston SMSA	2288.6	113.6	3.780	2.48	22.35	19.7	5
Brockton-Taunton-Bristol SMSA	97.3	4.0	0.351	0.23	2.08	50.9	10
Fall River-New Bedford SMSA	1561.0	93.1	0.449	0.29	2.65	2.8	7
Springfield-Holyoke-Chicopee SMSA	420.4	22.3	0.590	0.38	3.49	15.6	5
Worcester-Fitchburg-Leominster SMSA	95.9	4.1	0.647	0.42	3.83	92.1	13
Barnstable County	542.5	32.0	0.098	0.05	0.52	1.6	12
MASSACHUSETTS STATE TOTALS	5005.7	269.4	5.920	3.88	34.92	12.9	

Includes all plants detailed on attached data sheets.

REFUSE COMBUSTION FOR POWER GENERATION
Massachusetts, 1971 - "Coal Plants" Only

AREA	RATED CAPACITY MW	(b) ENERGY RQMT. $10^{12}\frac{BTU}{yr}$	AREA POP. MILLIONS	(a) REFUSE GENERATION		POTENTIAL ENERGY SUPPLY FROM REFUSE (a/b %)	TYPICAL TRANS. DISTANCE miles
				$10^6\frac{tons}{yr}$	$10^{12}\frac{BTU}{yr}$		
Boston SMSA	1421.3	66.7	3.780	2.48	22.35	33.5	5
Brockton-Taunton-Bristol SMSA	49.0	1.9	0.351	0.23	2.08	105.1	10
Fall River-New Bedford SMSA	1546.7	92.9	0.449	0.29	2.65	2.8	7
Springfield-Holyoke-Chicopee SMSA	420.4	22.3	0.590	0.38	3.49	15.6	5
Worcester-Fitchburg-Leominster SMSA	95.9	4.1	0.647	0.42	3.83	92.1	13
Barnstable County	-	-	0.098	0.05	0.52	-	-
MASSACHUSETTS STATE TOTAL	3533.3	188.2	5.920	3.88	34.92	18.6	

Includes all plants capable* of burning coal (design fuel and/or current fuel). Includes all plants in attached data sheets except Nos. 4, 5, 13, 14, 17, 18, 19, 21 and 22.

* Does not differentiate between types of firing -- assumes all types capable of refuse burning.

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: Massachusetts

SMSA-COUNTY/PLANT	RATED CAPACITY	LOAD FACTOR	ENERGY RQMT.	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU %			BOTTOM ASH HANDLING	AIR POLLUTION CONTROL		INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY"	TYPICAL TRANS. DISTANCE miles
	MW	%	10^{12} $\frac{BTU}{yr}$		COAL	OIL	GAS		TYPE	EFF. %		tons/day	
Boston SMSA													
2. Mystic I (Boston Edison Co.)													
Boiler 1	50			RTAN	-	100	-	DRY	E	95(d)	1943	105	5
2	50			RTAN	-	100	-	DRY	E	95(d)	1945	105	
3	50			RTAN	-	100	-	DRY	E	95(d)	1947	105	
	150	38	7.40		-	100	-						
					des.p.coal oil								
Mystic II (Boston Edison Co.)													
Boiler 4	156			RTAN	-	100	-	DRY	E	95(d)	1957	280	5
5	156			RTAN	-	100	-	DRY	E	95(d)	1959	280	
6	156.8			RTAN	-	100	-	DRY	E/M_gO scrub	95(d)/90(t)	1961	280	
	468.8	48	19.94		-	100	-						
					des.p. coal oil								
4. New Boston (Boston Edison Co.)													
Boiler 1	380			ROPP	-	100	-	DRY	None	-	1965	950	5
2	380			ROPP	-	100	-	DRY	•	-	1967	950	
	760	72	72.34		-	100	-						
					des. oil								
12. Salem Harbor (New England Power Co.)													
Boiler 1	81.9			PCFR/ RFRO	-	100	-	WET	E	80	1951	165	5
2	81.9			PCFR/ RFRO	-	100	-	WET	E	80	1952	165	
3	156			PCFR/ RFRO	-	100	-	WET	E	80	1958	315	
	319.8	53	15.68		-	100	-						
					des. p. coal oil								

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: Massachusetts

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} BTU/yr	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANS. DISTANCE miles
Boston SMSA - Cont'd													
3. L-Street													
(Boston Edison Co.)													
Boiler													
62	All boilers under 100 MW				-	100	-	DRY	E	80(d)	1921		5
64					-	100	-	DRY	E	80(d)	1921		
66					-	100	-	DRY	E	80(d)	1921		
68					-	100	-	DRY	E	80(d)	1921		
70					-	100	-	DRY	E	80(d)	1924		
72					-	100	-	DRY	E	80(d)	1924		
74					-	100	-	DRY	E	84(d)	1939		
75					-	100	-	DRY	E	90(d)	1942		
76					-	100	-	DRY	E	84(d)	1939		
	153.8	19	5.54		des.p.	coal						230	
14. Allen St.													
(Braintree Elec. Light Dept.)													
Boiler Breakdown Not Available	**							**	**	**		35	5
	21	38	0.83		-	100	-						
					des.	oil							
22. Potter													
(Braintree Elec. Light Dept.)	**							**	**	**		40	5
	12.5	72	0.95		-	100	-						
					des.	oil							

** No FPC-67 filed

YEAR: 1971
STATE: Massachusetts

REFUSE COMBUSTION FOR POWER GENERATION

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} $\frac{BTU}{yr}$	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANS. DISTANCE miles
Boston SMSA - Cont'd													
23. Kendall Square (Cambridge Electric Light Co.)													5
Boiler 1	Common Steam Header			RFRO				None	E	Inop- erative	1949		
2				RFRO				None	E		1949		
3				RFRO				None	E		1953		
	67.5	56	3.63		-	70	30					130	
				des. p.	coal	oil	gas						
18. Blackstone Street (Cambridge Electric Light Co.) Boiler Breakdown Not Available	*							*	*	*		30	5
	24.8	31	0.75		-	55	45						
					des.	oil	gas						
21. Lynnway 1+2** (Massachusetts Electric Co.)													5
Boiler 1				RFRO/ GFRO	-	100	-	None	None	-			
2	Common Steam Header			RFRO/ GFRO	-	100	-	None	None	-			
3				RFRO/ GFRO	-	100	-	None	None	-			
4				RFRO	-	100	-	None	None	-			
	49	40	2.06		-	100	-					115	
					des.	oil	gas						

** Plant Retired 12/31/72
* No FPC-67 filed

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: Massachusetts

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} BTU/yr	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANS. DISTANCE miles
Boston SMSA- Cont'd													
1. Edgar II**													
(Boston Edison Co:)													
Boiler 9	87.1			RTAN	-	100	-	DRY	E	95(d)	1949	170	5
10	87.1			RTAN	-	100	-	DRY	E	95(d)	1952	170	
11	87.1			RTAN	-	100	-	DRY	E	95(d)	1954	170	
	261.3	47	14.57	des. p.	-	100	-						
					coal	oil	gas						
AREA TOTAL	2288.6	-	113.69										

** Edgar I Retired 11/1/71. Capacity was 72.5 MW, current fuel dist. was 100% oil, initial year of operation 1925.

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} BTU/yr	TYPE OF FIRING	COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANS. DISTANCE miles
Fitchburg-Leominster-Worcester SMSA													
20. Fitchburg													
(Fitchburg Gas & Electric Co.)	61.4	39	2.50	des. p.	1 coal	73 oil	26 gas	*	*	*		105	22
15. Webster Street													
(Massachusetts Electric Co.)													
Boiler 15 (retired 12.31.72)	34.5	50	1.66	PCFR	91 des.s. coal	9 oil	-	DRY	SCTA	NR	1950	70	<5
AREA TOTAL	95.9		4.16										

* No FPC-67 filed

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: Massachusetts

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} BTU/yr	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANS. DISTANCE miles
Springfield-Chicopee-Holyoke SMSA													
6. Mt. Tom (Holyoke Water and Power Co.)													
Boiler 1	136	59***	7.00	PCFR	-	100	-	DRY	C	95*	1960	300	5
					des.p.	coal oil							
10. West Springfield (Western Mass. Electric Co.)													
Boiler 1	46			PCTA/ RTAN				DRY	E	65	1949	120	5
2	50			PCTA/ RTAN				DRY	E	67	1952	130	
3	113.6			PCTA				DRY	E	98.8/70**	1957	300	
	209.6	62	13.19		14	62	24						
					des.	oil	gas						
24. Riverside ✓ (Holyoke Water and Power Co.)													
Boiler 9	Range 2-18			PCFR/ RFRO	-	100	-	NR	MCTA	94	1943		5
8				RFRO	-	100	-	None	None	-	1936		
6				RFRO	-	100	-	"	"	-	1924		
3				RFRO	-	100	-	"	"	-	1921		
	44.8	19	0.88		-	100	-						
					des.p.	coal, oil						35	

* Efficiency based on coal firing.
** 98.8% for coal, 70% for oil.
✓ In addition, boilers 1,2,4 operate as emergency backup only. These 3 boilers are OSTO fired, with dry bottom ash handling, built in 1921-22.

*** State average

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: Massachusetts

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} BTU/yr	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANS. DISTANCE miles
Springfield-Chicopee-Holyoke SMSA -Con't													
16. Holyoke (Holyoke Gas and Electric)													
Boiler 5	Range 5- 17			PCFR/ RFRO/ GFRO				DRY	MCTA	80	1960		5
6				PCFR/ RFRO/ GFRO				DRY	MCTA	80	1954		
7				RFRO/ GFRO				None	None	-	1941		
8				RFRO/ GFRO				"	"	-	1947		
	30	45	1.29		7 des.s.p. coal	61 oil	32 gas					55	
AREA TOTAL	420.4		22.36										
Barnstable County													
5. Canal (Canal Electric Co.)													
Boiler 1	542.5	75	32.00	ROPP	- des.	100 oil	-	None	None	-	1968	1370	12
AREA TOTAL	542.5		32.00										Boston 50 Providence, RI 45

YEAR: 1971
STATE: Massachusetts

REFUSE COMBUSTION FOR POWER GENERATION

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} $\frac{BTU}{yr}$	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANS. DISTANCE miles
Fall River-New Bedford SMSA													
7. Somerset (Montaup Electric Co.)													7
Boiler 1	148			RFRO				DRY	None	-	1925		
2				RFRO				DRY	"	-	1928		
3				RFRO				DRY	"	-	1925		
4				RFRO				DRY	"	-	1928		
5				RFRO				DRY	"	-	1925		
6				RTAN				DRY	"	-	1943		
7	181			RTAN				DRY	MCTA	85	1952		
8				RTAN				WET	MCTA	85	1959		
	329	56	19.44		14 des.p. coal	86 oil	-					830	
11. Brayton Point (New England Power Co.)													7
Boiler 1	241			PCTA/ RTAN	-	100	-	WET	E	90	1963	575	
2	241			PCTA/ RTAN	-	100	-	WET	E	90	1964	575	
3	642.7			PCOP/ ROPP	-	100	-	WET	E	84.5	1969	1540	
	1124.7	72	66.12		- des.p. coal	100 oil	-						
19. Hathaway St. (Fall River Electric Co.)	14.3	9	0.13		- des.	100 oil	-	*	*	*	*	5	7

* No FPC-67 filed

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: Massachusetts

SMSA-COUNTY/PLANT	RATED CAPACITY	LOAD FACTOR	ENERGY RQMT.	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU %			BOTTOM ASH HANDLING	AIR POLLUTION CONTROL		INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY"	TYPICAL TRANS. DISTANCE miles
	MW	%	10^{12} BTU/yr		COAL	OIL	GAS		TYPE	EFF. %		tons/day	
Fall River-New Bedford SMSA -Cont'd													
8. Cannon St. (New Bedford Gas & Edison El. Lt. Co.)													
Boiler 1	12.5			PCFR/ RFRO/ GFRO				DRY	E	78	1947	35	7
2	12.5			PCFR/ RFRO/ GFRO				DRY	E	79	1947	35	
3	38			RFRO/ GFRO				None	E	88	1950	120	
7	6			RFRO/ GFRO				"	None	-	1956	15	
8	6			RFRO/ GFRO				"	"	-	1956	15	
10	3			RFRO				"	"	-	1967	5	
25 *	(5.5)			RFRO				"	"	-	1922		
26 *	(5.5)			RFRO				"	"	-	1922		
27 *	(5.5)			RFRO				"	"	-	1922		
28 *	(5.5)			RFRO				"	"	-	1922		
29	7.5			RFRO/ GFRO				"	SCTA	95	1941	20	
30	7.5			RFRO/ GFRO				"	SCTA	95	1941	20	
	93	60	7.42		-	76	24						
					des.p. coal	oil	gas						
AREA TOTAL	1561.0		93.11										

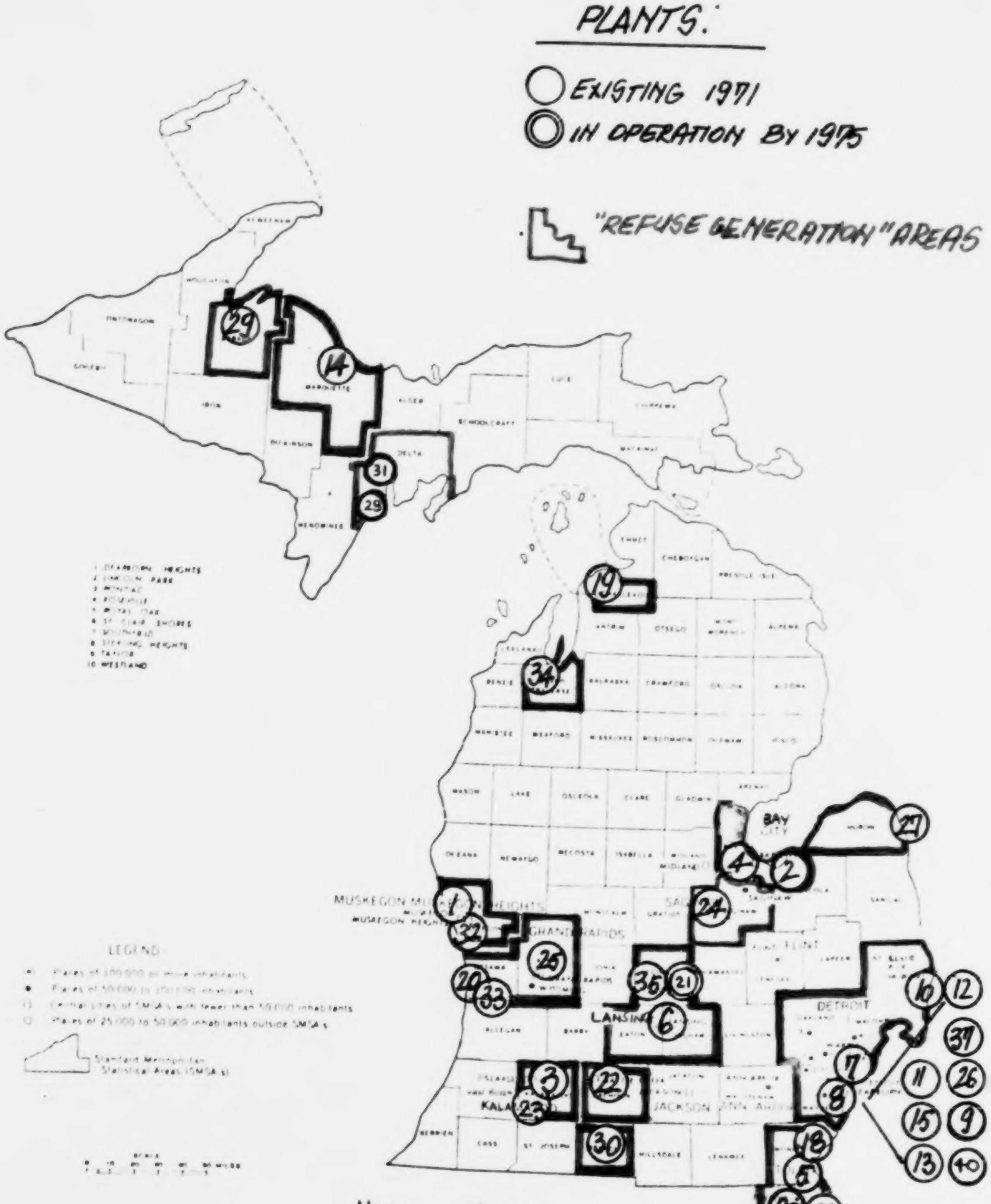
* Boilers 25-28 Retired in 1971 and therefore not included in total capacity.

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: Massachusetts

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} BTU/yr	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANS. DISTANCE miles
Brockton-Taunton-Bristol SMSA													
9. West Water St.													
(Taunton Municipal Lighting)													
Boiler 1	Range 2.25-18			RFRO	-	100	-	NR	None	-	1926		10
2				RFRO	-	100	-	NR	"	-	1927		
3				RFRO	-	100	-	NR	"	-	1928		
4				RFRO	-	100	-	NR	"	-	1933		
5				RFRO	-	100	-	NR	"	-	1942		
6				RFRO	-	100	-	NR	"	-	1951		
7				RFRO	-	100	-	NR	MCTA	80	1957		
	49	31	1.98		- des.coal	100 oil	-					80	
13. Cleary													
(Taunton Municipal Lighting)													
Boiler 8	28.3	59	1.89	RFRO	- des.	100 oil	-	None	None	-	1966	80	10
17. E. Bridgewater													
(Brockton Edison Co.)	20	11	0.23		- des.	100 oil	-	*	*	*	*	10	8
AREA TOTAL	97.3		4.09										

* No FPC-67 filed


PLANTS:
EXISTING 1971
IN OPERATION BY 1975
"REFUSE GENERATION" AREAS
29
14
31
28
19
34
27
4
2
1
32
24
25
20
33
36
21
6
10
12
39
17
11
26
8
15
9
13
40
3
22
23
30
18
5
20
21
BAY CITY
MUSKEGON
MUSKEGON HEIGHTS
GRAND RAPIDS
LANSING
FLINT
DETROIT
JACKSON
ANN ARBOR
KALAMAZOO
1 DEARBORN HEIGHTS
2 LINCOLN PARK
3 PONTIAC
4 ROSEVILLE
5 ROYAL OAK
6 ST. CLAIR SHORES
7 SOUTHFIELD
8 STERLING HEIGHTS
9 TAYLOR
10 WESTLAND
LEGEND
Places of 100,000 or more inhabitants
Places of 50,000 to 100,000 inhabitants
Central cities of SMSA's with fewer than 50,000 inhabitants
Places of 25,000 to 50,000 inhabitants outside SMSA's
Standard Metropolitan Statistical Areas (SMSA's)
SCALE

Michigan plants 5 + 18
included with Ohio plants 20,21 in
"Toledo SMSA"

REFUSE COMBUSTION FOR POWER GENERATION

Michigan, 1971 - All Fossil Fuel Plants

AREA	RATED CAPACITY MW	(b) ENERGY RQMT. 10^{12} $\frac{BTU}{yr}$	AREA POP. millions	(a) REFUSE GENERATION 10^6 $\frac{tons}{yr}$	(a) REFUSE GENERATION 10^{12} $\frac{BTU}{yr}$	POTENTIAL ENERGY SUPPLY FROM REFUSE (a/b %)	TYPICAL TRANS. DISTANCE miles
Bay City SMSA	1144.5	67.5	0.119	0.07	0.70	1.0	<5
Detroit SMSA (incl. St. Clair Co.)	5661.3	335.9	4.405	2.89	26.05	7.3	13
Grand Rapids SMSA	747.3	32.9	0.548	0.36	3.24	9.8	27
Kalamazoo SMSA	206.0	13.2	0.206	0.13	1.22	0.2	<5
Lansing SMSA	467.5	16.7	0.388	0.25	2.29	13.7	<5
Muskegon-Muskegon Heights SMSA	530.5	36.5	0.160	0.10	0.95	2.6	<5
Saginaw SMSA	103.5	1.3	0.224	0.14	1.32	99.2	<5
Baraga County	18.8	1.4	0.008	0.00	0.04	2.7	<5
Branch County	11.1	0.5	0.039	0.02	0.21	35.6	<5
Calhoun County	30.0	1.3	0.145	0.08	0.77	56.2	5
Charlevoix County	41.8	2.9	0.017	0.01	0.09	3.0	5
Grand Traverse County	35.0	1.2	0.040	0.02	0.21	16.8	<5
Huron County	121.0	2.1	0.035	0.02	0.19	9.0	20
Marquette County	174.7	12.0	0.066	0.03	0.35	2.9	<5
Delta County	29.0	1.8	0.036	0.02	0.19	10.6	<5
MICHIGAN STATE TOTALS	9322.0	527.9	6.436	4.19	37.82	7.2	

Includes all plants detailed on attached data sheets.

REFUSE COMBUSTION FOR POWER GENERATION

Michigan, 1971 - "Coal Plants" Only

AREA	RATED CAPACITY MW	(b) ENERGY RQMT. 10^{12} $\frac{BTU}{yr}$	AREA POP. millions	(a) REFUSE GENERATION 10^6 $\frac{tons}{yr}$	(a) REFUSE GENERATION 10^{12} $\frac{BTU}{yr}$	POTENTIAL ENERGY SUPPLY FROM REFUSE (a/b %)	TYPICAL TRANS. DISTANCE miles
Bay City SMSA	1144.5	67.5	0.119	0.07	0.70	1.0	<5
Detroit SMSA (incl. St. Clair Co.)	5503.3	329.4	4.405	2.89	26.05	7.9	13
Grand Rapids SMSA	747.3	32.9	0.548	0.36	3.24	9.8	27
Kalamazoo SMSA	206.0	13.2	0.206	0.13	1.22	9.2	<5
Lansing SMSA	467.5	16.7	0.388	0.25	2.29	13.7	<5
Muskegon-Muskegon Heights SMSA	530.5	36.5	0.160	0.10	0.95	2.6	<5
Saginaw SMSA	103.5	1.3	0.224	0.14	1.32	99.2	<5
Baraga County	18.8	1.4	0.008	0.00	0.04	2.7	<5
Branch County	11.1	0.5	0.039	0.02	0.21	35.6	<5
Calhoun County	30.0	1.3	0.145	0.08	0.77	56.2	5
Charlevoix County	41.8	2.9	0.017	0.01	0.09	3.0	5
Grand Traverse County	35.0	1.2	0.040	0.02	0.21	16.8	<5
Huron County	121.0	2.1	0.035	0.02	0.19	9.0	20
Marquette County	174.7	12.0	0.066	0.03	0.35	2.9	<5
Delta County	29.0	1.8	0.036	0.02	0.19	10.6	<5
MICHIGAN STATE TOTALS	9145.5	520.6	6.436	4.19	37.82	7.3	

Includes all plants capable* of burning coal (design fuel and/or current fuel). Includes all plants in attached data sheets except plant #37, Detroit SMSA.

* Does not differentiate between types of firing--assumes all types capable of refuse burning

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: MICHIGAN

SMSA-COUNTY/PLANT	RATED CAPACITY	LOAD FACTOR	ENERGY RQMT.	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU %			BOTTOM ASH HANDLING	AIR POLLUTION CONTROL		INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY"	TYPICAL TRANS. DISTNACE
	MW	%	10^{12} $\frac{BTU}{yr}$		COAL	OIL	GAS		TYPE	EFF. %		tons/day	miles
Detroit SMSA													
7. Mistersky (Detroit Public Lighting Co.)													
Boiler 1	20			PCFR	100			Dry	None	-	1927	35	7
2	20			PCFR	100			Dry	"	-	1927	35	
3	20			PCFR	100			Dry	"	-	1927	35	
4	20			PCFR	100			Dry	"	-	1930	35	
5	44			PCTA	100			Wet	C	96.5	1950	80	
6	50			PCTA	100			Wet	C	97.7	1958	90	
	174	45	7.40		100	-	-						
					des p.coal								
11. River Rouge Detroit Edison													
Boiler 1	283			PCFR				Dry	C	90	1956	660	7
2	292			PCTA				Dry	C	97.2	1957	680	
3	358.2			PCFR				Dry	C	96.7	1958	840	
	933.2	65	51.33		92	8	-						
					des p coal/oil								

NOTES:

Plants No. 5 (Whiting) and no. 18 (Monroe) are included in the Toledo SMSA (see Ohio)

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: MICHIGAN

SMSA-COUNTY/PLANT	RATED CAPACITY	LOAD FACTOR	ENERGY RQMT.	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU %			BOTTOM ASH HANDLING	AIR POLLUTION CONTROL		INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY"	TYPICAL TRANS. DISTANCE miles
	MW	%	10^{12} BTU/yr		COAL	OIL	GAS		TYPE	EFF. %		tons/day	
Detroit SMSA Cont'd													
9. Delray (Detroit Edison)													
Boiler 1	TOTAL 225			OSTO/ GOPP				Dry	MCTA	*	1942		7
7				OSTO GOPP				Dry	MCTA	*	1938	600	
8				OSTO/ GOPP				Dry	MCTA	*	1938		
9				OSTO/ GOPP				Dry	MCTA	*	1940		
10				OSTO/ GOPP				Dry	MCTA	*	1939		
11				OSTO/ GOPP				Dry	MCTA	*	1941		
12				OSTO/ GOPP				Dry	MCTA	*	1940		
2	TOTAL 150			OSTO/ GOPP				Dry	MCTA	*	1929	400	
3				OSTO/ GOPP				Dry	MCTA	*	1929		
4				OSTO/ GOPP				Dry	MCTA	*	1929		
5				OSTO/ GOPP				Dry	MCTA	*	1929		
6				OSTO/ GOPP				Dry	MCTA	*	1929		
	375	52	25.72		- des.oil/gas	75	25						

* No longer in use. Plant converted to oil/gas March 1970. No longer equipped to burn coal (Dec. 31, 1970: FPC-67)

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: MICHIGAN

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} BTU/yr	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANS. DISTANCE miles
Detroit SMSA - Cont'd													
12. St. Clair													
Detroit Edison													
Boiler 1	169			PCFR				Dry	C	91	1953	440	18
2	156			PCFR				Dry	C	93	1953	400	
3	156			PCFR				Dry	C	93	1954	400	
4	169			PCFR				Dry	C	93	1954	440	
5	358			CYCL				Dry	E	82	1959	935	
6	353			PCFR				Dry	C	96	1961	920	
7	544			PCTA				Dry	E	98.4	1969	1420	
	1905	76	116.10		97 des.p.coal/oil	3	-						
10. Marysville													
Detroit Edison													
Boiler 3	TOTAL 150			OSTO				Dry	None		1922	360	45
4				OSTO				Dry	None		1923		
5				OSTO				Dry	None		1926		
6				OSTO				Dry	None		1927		
7				OSTO				Dry	None		1926		
8				OSTO				Dry	None		1930		
9	TOTAL 150			PCTA				Dry	E	96.2	1942	360	
10				PCTA				Dry	E	96.2	1943		
11				PCTA				Dry	E	99.5	1947		
12				PCTA				Dry	E	99.5	1943		
	300	48	16.98		99 des.s. & p.coal	-	1						

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: MICHIGAN

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} BTU/yr	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPCIAL TRANS. DISTANCE miles
Detroit SMSA - Cont'd													
15. Wyandotte													
Wyandotte Dept. of Municipal Services													
Boiler 1	4			OSTO	100	-	-	Dry	Grav	N.R.	1933	-	7
2	4			OSTO	100	-	-	Dry	Grav	N.R.	1933	-	
3	6			SPRE	100	-	-	Dry	MCTA	80	1942	-	
4	10			SPRE	100	-	-	Dry	MCTA	80	1948	5	
5	22			SPRE	100	-	-	Dry	MCTA	95	1958	15	
	46	19	.768		100 des.s.coal	-	-						
40. Wyandotte-North													
Detroit Edison													
Boiler 7				PCFR				Dry	None	-	1942		7
9				PCFR				Wet	C	97	1948		
10	*			PCFR				Wet	C	99	1948		
11				PCFR				Wet	E	99	1968		
12				PCFR				Wet	E	99	1968		
	54.1	23	1.43		81 des.p.coal	6 oil	13 gas					60	
Wyandotte-South Detroit Edison	18.5	47	0.83		100 des.s.coal	-	-					35	
WYANDOTTE TOTALS	72.6		2.26										

* common header system

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: MICHIGAN

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} BTU/yr	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPCIAL TRANS. DISTANCE miles
Detroit SMSA- Cont'd													
13. Trenton Channel Detroit Edison													
Boiler 1	23			PCOP/ GOPP				Dry	E	*	1925	65	7
2	23			PCOP/ GOPP				Dry	E	*	1925	65	
4	23			PCOP/ GOPP				Dry	E	*	1924	65	
5	23			PCOP/ GOPP				Dry	E	*	1924	65	
6	23			PCOP/ GOPP				Dry	E	*	1924	65	
7	23			PCOP/ GOPP				Dry	E	*	1924	65	
8	23			PCOP/ GOPP				Dry	E	*	1924	65	
9	23			PCOP/ GOPP				Dry	E	*	1924	65	
10	23			PCOP/ GOPP				Dry	E	*	1926	65	
11	23			PCOP/ GOPP				Dry	E	*	1927	65	
12	23			PCOP/ GOPP				Dry	E	*	1927	65	
13	23			PCOP/ GOPP				Dry	E	*	1928	65	
14	23			PCOP/ GOPP				Dry	E	*	1929	65	

Cont'd next page

* 85(d) not used now (gas-fired boilers)

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: MICHIGAN

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} BTU/yr	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANS. DISTANCE miles
Detroit SMSA - Cont'd													
13. Trenton Channel (continued)													
Boiler 16	60			PCTA				Dry	E	95	1949	170	7
17	60			PCTA				Dry	E	95	1949	170	
18	60			PCTA				Dry	E	95	1949	170	
9A	536.5			PCTA				Dry	E	95	1968	1525	
19	60			PCTA				Dry	E	98.5	1949	170	
	1075.5	70	71.57		72	2	26						
26. Pennsalt Detroit Edison													
Boiler 21	9.25			PCFR				Dry	MCTA	53	1934	10	7
22	9.25			PCFR				Dry	MCTA	53	1941	10	
23	9.25			PCFR				Dry	C	98	1948	10	
24	9.25			PCFR				Dry	C	96	1949	10	
	37	24	1.06		99 des.p.coal	1	-						
37. Enrico Fermi (Detroit Edison)													
Boiler 1	158			Tangential Fired	-	100	-	None	None	-	1966	275	7
	158	33	6.48		-	100 des.oil	-						

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: MICHIGAN

SMSA-COUNTY/PLANT	RATED CAPACITY	LOAD FACTOR	ENERGY RQMT.	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU %			BOTTOM ASH HANDLING	AIR POLLUTION CONTROL		INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY"	TYPCIAL TRANS. DISTANCE
	MW	%	10^{12} $\frac{BTU}{yr}$		COAL	OIL	GAS		TYPE	EFF. %		tons/day	miles
Detroit SMSA - Cont'd													
8. Conners Creek (Detroit Edison)													
Boiler 1	TOTAL 315 MW			OTSO/GOPP/ROPP				Dry	Grav	60	1934	825	7
2				OSTO/GOPP/ROPP				Dry	Grav	60	1935		
3				OSTO/GOPP/ROPP				Dry	Grav	60	1935		
4				OSTO/GOPP/ROPP				Dry	Grav	60	1935		
6				OSTO/GOPP/ROPP				Dry	Grav	60	1939		
9				OSTO/GOPP/ROPP				Dry	Grav	60	1939		
10				OSTO/GOPP/ROPP				Dry	Grav	60	1937		
11				OSTO/GOPP/ROPP				Dry	Grav	60	1937		
12				OSTO/GOPP/ROPP				Dry	Grav	60	1936		
13				OSTO/GOPP/ROPP				Dry	Grav	60	1936		
14				OSTO/GOPP/ROPP				Dry	Grav	60	1936		
15	TOTAL 270			PCFR				Dry	C	99	1951	705	
16				PCFR				Dry	C	99	1951		
17				PCFR				Dry	C	99	1951		
18				PCFR				Dry	C	99	1951		
	585	53	36.26		61 des.s.p.coal	6 oil	33 gas						
AREA TOTAL	5661.3		335.93										

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: MICHIGAN

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} BTU/yr	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANS. DISTANCE Miles
Lansing SMSA													
6. Eckert (Lansing Board of Water and Light)													
Boiler 1	50			PCFR	100	-	-	WET	E	97.5	1954	80	<5
2	50			PCTA	100	-	-	WET	E	97.5	1958	80	
3	50			PCFR	100	-	-	WET	E	97.5	1961	80	
4	75			PCFR	100	-	-	WET	E	97.5	1964	120	
5	80.5			PCFR	100	-	-	WET	E	97.5	1968	130	
6	80.5			PCFR	100	-	-	WET	E	97.5	1970	130	
	386	39	14.61		100	-	-						
					des. p., s. coal								
35. Ottawa St. (Lansing Board of Water and Light)													
Boiler 1	13.9			PCFR				WET	E	97.5	1939	15	<5
2	13.9			PCFR				WET	E	97.5	1939	15	
3	17.9			PCFR				WET	E	97.5	1949	20	
4	17.9			PCFR				WET	E	97.5	1951	20	
5	17.9			PCFR				WET	E	97.5	1951	20	
	81.5	23	2.15		99	1	-						
					des.p. coal								
AREA TOTAL	467.5		16.76										

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: MICHIGAN

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} $\frac{BTU}{yr}$	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANS. DISTANCE miles
Grand Rapids SMSA													
20. Campbell (Consumer Power Company)													
Boiler 1	265			PCTA	100	-	-	Dry	E	89.9(t)	1962	515	
2	385			PCOP	100	-	-	Dry	E	98.1(t)	1966	750	
	650	58	29.93		100 des.p.coal								28
25. Wealthy Street (Consumer Power Company)	20	26	0.64		100 des.p.coal	-	-	*	*	*		25	< 5
33. J. De Young (Holland Board of Public Works)	77.3	30	2.42		56 des.coal	-	44	*	*	*		100	21
AREA TOTAL	747.3		32.99										
Muskegon-Muskegon Heights SMSA													
1. Cobb (Consumer Power Company)													
Boiler 1	66			PCTA	100			Dry	E	98	1948	190	< 5
2	66			PCTA	100			Dry	E	99	1948	190	
3	66			PCTA	100			Dry	E	98	1950	190	
4	156.25			PCTA	100			Dry	E	97	1956	455	
5	156.25			PCTA	100			Dry	E	99	1957	455	
	510.5	73	34.98		100 des.p.coal								

* No FPC-67 filed

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: MICHIGAN

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} $\frac{BTU}{yr}$	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANS. DISTANCE miles
Muskegon-Muskegon Heights SMSA-Cont'd													
32. Harbor Island (Grand Haven Board of Water & Light)	20	68	1.55		100 des.s.coal	-	-	*	*	*	*	65	<5
AREA TOTAL	530.5		36.53										

* No FPC 67 filed

YEAR: 1971
STATE: Michigan

REFUSE COMBUSTION FOR POWER GENERATION

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} $\frac{BTU}{yr}$	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANS. DISTANCES miles
Saginaw SMSA													
24. Saginaw River													
(Consumer Power Co.)													
Boiler 6	30			OSTO	100	-	-	DRY	None	-	1928	20	<5
7				OSTO	100	-	-	DRY	None	-	1928		
9	35			OSTO	100	-	-	DRY	None	-	1928	25	
10	35			OSTO	100	-	-	DRY	None	-	1929	25	
11	3.5			OSTO	100	-	-	DRY	None	-	1929	-	
12				OSTO	100	-	-	DRY	None	-	1929		
13				OSTO	100	-	-	DRY	None	-	1930		
14				OSTO	100	-	-	DRY	None	-	1930		
15				OSTO	100	-	-	DRY	None	-	1930		
16				OSTO	100	-	-	DRY	None	-	1930		
	103.5	10	1.33		100 des.p. coal	-	-						
AREA TOTAL	103.5		1.33										
Bay City SMSA													
4. Weadock													
(Consumer Power Co.)													
Boiler 1	35			PCFR				DRY	MCAX		1940	85	<5
2	35			PCFR				DRY	MCAX		1940	85	
3	50			PCFR				DRY	MCAX		1943	120	
4	50			PCFR				DRY	MCAX		1948	120	
5	66			PCFR				DRY	MCAX		1949	160	
6	66			PCFR				DRY	MCAX		1949	160	
7	156.25			PCTA				DRY	MCAX/E		1955	380	
8	156.25			PCTA				DRY	MCAX/E		1958	380	
	614.5	59	35.20		98 des.p.coal	-	2						

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: MICHIGAN

SMSA-COUNTY/PLANT	RATED CAPACITY	LOAD FACTOR	ENERGY RQMT.	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU %			BOTTOM ASH HANDLING	AIR POLLUTION CONTROL		INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY"	TYPICAL TRANS. DISTANCES
	MW	%	10^{12} BTU/yr		COAL	OIL	GAS		TYPE	EFF. %		tons/day	miles
Bay City - SMSA Cont'd													
2. Karn (Consumer Power Co)													
Boiler 1	265			PCTA	100	-	-	Dry	E	70	1959	690	<5
2	265			PCFR	100	-	-	Dry	E	88	1961	690	
	530	77	32.32		100								
AREA TOTAL	1144.5		67.52		des. p. coal								
Grand Traverse County													
34. Bayside Station	35	31	1.25		89	11	-	*	*	*		50	<5
(Traverse City Light & Power Dept.)					des. scoal	gas							
AREA TOTAL	35		1.25										
Charlevoix County													
19. Advance	41.8	64	2.98		100	-	-	*	*	*	1953	125	5
(N. Michigan Electric Corp.)					des. p. coal								
AREA TOTAL	41.8		2.98										
Marquette County													
14. Presque Isle (Upper Peninsula Power Co.)													
Boiler 1	25			PCFR				Dry	MCTA/E	75/90	1955	70	<5
2	37.5			PCTA				Wet	MCTA/E	75/90	1962	110	
3	54.4			PCTA				Wet	MCTA/E	75/90	1964	160	
4	57.8			PCTA				Wet	MCTA/E	75/90	1966	170	
	174.7	71	12.07		99	1	-						
AREA TOTAL	174.7		12.07		des p coal		gas						

* No FPC-67 filed

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: Michigan

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} $\frac{BTU}{yr}$	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANS. DISTANCE miles
Kalamazoo SMSA													
3. Morrow (Consumer Power Co.) Boiler 1	35			PCFR/ GFRO				DRY	MCAX	80	1939	90	<5
2	35			PCFR/ GFRO				DRY	MCAX	80	1939	90	
3	50			PCFR/ GFRO				DRY	MCAX	81	1941	125	
4	66			PCFR/ GFRO				DRY	MCAX	81	1949	170	
	186	53	12.60		des.	31 oil	69 gas						
23. Kalamazoo (Consumer Power Co.)	20	27	0.67		100 des.p. coal			*	*	*		25	<5
AREA TOTAL	206		13.27										
Branch County													
30. Coldwater (Board of Public Utilities)	11.1	46	0.59	*	100 dess. coal			*	*	*	-	25	< 5
AREA TOTAL	11.1		0.59										

* No FPC 67 filed

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: Michigan

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} $\frac{BTU}{yr}$	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU %			BOTTOM ASH HANDLING	AIR POLLUTION CONTROL		INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANS. DISTANCE miles
					COAL	OIL	GAS		TYPE	EFF. %			
Baraga County													
29. J.H. Warden (Upper Peninsula Power Co.)	18.8	68	1.46		44 des.p. coal	-	56	*	*	*		60	<5
AREA TOTAL	18.8		1.46										
Huron County													
27. Harbor Beach - (Detroit Edison)	121	19	2.12	PCFR	93 des p coal	7 oil	-	DRY	E	99	1968	85	20
AREA TOTAL	121		2.12										
Calhoun County													
22. Elm St. (Consumer Power Co.) Boiler 7	30	37	1.37	PCFR	100 des.p. coal			DRY	MCAX	80	1937	55	5
AREA TOTAL	30		1.37										

* No FPC 67 filed

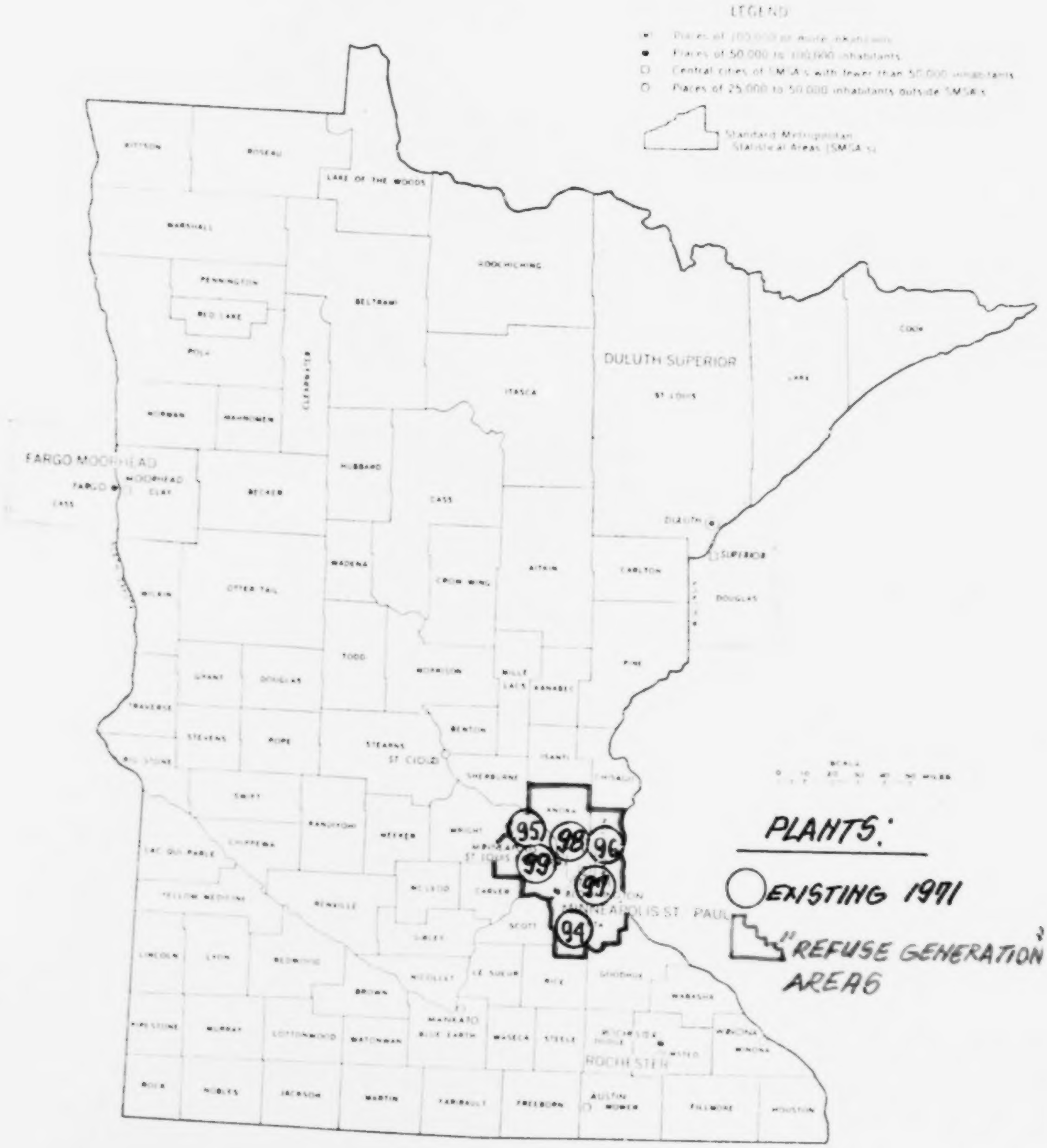
YEAR: 1971
STATE: MICHIGAN

REFUSE COMBUSTION FOR POWER GENERATION

SMSA-COUNTY/PLANT	RATED CAPACITY	LOAD FACTOR	ENERGY RQMT.	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU %			BOTTOM ASH HANDLING	AIR POLLUTION CONTROL		INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY"	TYPICAL TRANS. DISTANCE
	MW	%	10^{12} BTU/yr		COAL	OIL	GAS		TYPE	EFF. %		tons/day	Miles
Delta County													
28. Escanaba Upper Peninsula Power Co.	23	61	1.59	*	100 des.s.coal	-	-	*	*	*	-	65	
31. Gladstone City of Gladstone	6.0	33	0.22	*	100 des.coal	-	-	*	*	*		10	
AREA TOTAL	29		1.81										

* No FPC 67 filed

MINNESOTA


LEGEND
Places of 100,000 or more inhabitants
Places of 50,000 to 100,000 inhabitants
Central cities of SMSA's with fewer than 50,000 inhabitants
Places of 25,000 to 50,000 inhabitants outside SMSA's
Standard Metropolitan Statistical Areas (SMSA's)
SCALE
0 10 20 30 40 50 MILES
PLANTS:
EXISTING 1971
"REFUSE GENERATION" AREAS
95
98
96
99
97
94
DULUTH SUPERIOR
FARGO MOORHEAD
MINNEAPOLIS ST. PAUL
ROCHESTER
DULUTH
SUPERIOR
FARGO
MOORHEAD
ST CLOUD
MANKATO
AUSTIN
KITTSON
ROSEAU
LAKE OF THE WOODS
MARSHALL
KOOCHICHING
PENNINGTON
RED LAKE
BELTRAMI
POLK
CLEARWATER
COOK
LAKE
ITASCA
ST LOUIS
NORMAN
MAHNOMEN
CLAY
CASS
BECKER
HUBBARD
CARLTON
DOUGLAS
AITKIN
CROW WING
WADENA
WILKIN
OTTER TAIL
TODD
PINE
GRANT
DOUGLAS
MORRISON
MILLE LACS
KANABEC
TRAVERSE
STEVENS
POPE
STEARNS
BENTON
ISANTI
BIG STONE
SHERBURNE
CHISAGO
SWIFT
ANOKA
KANDIYOHI
MEEKER
WRIGHT
LAC QUI PARLE
CHIPPEWA
HENNEPIN
YELLOW MEDICINE
RENVILLE
MCLEOD
CARVER
SCOTT
SIBLEY
LINCOLN
LYON
REDWOOD
NICOLLET
LE SUEUR
RICE
GOODHUE
WABASHA
BROWN
PIPESTONE
MURRAY
COTTONWOOD
WATONWAN
BLUE EARTH
WASECA
STEELE
DODGE
OLMSTED
WINONA
ROCK
NOBLES
JACKSON
MARTIN
FARIBAULT
FREEBORN
MOWER
FILLMORE
HOUSTON

REFUSE COMBUSTION FOR POWER GENERATION
Minnesota, 1971 - Minneapolis-St. Paul SMSA

AREA	RATED CAPACITY MW	(b) ENERGY RQMT. $10^{12}\ \frac{\text{BTU}}{\text{yr}}$	AREA POP. millions	(a) REFUSE GENERATION		POTENTIAL ENERGY SUPPLY FROM REFUSE (a/b %)	TYPICAL TRANS. DISTANCE miles
				$10^6\ \frac{\text{tons}}{\text{yr}}$	$10^{12}\ \frac{\text{BTU}}{\text{yr}}$		
All Fossil Fuel Plants							
Minneapolis-St. Paul SMSA	2048.8	106.8	1.856	1.21	10.97	10.3	8.5
"Coal Plants" only**							
Minneapolis-St. Paul SMSA	2018.8	106.1	1.856	1.21	10.97	10.3	8.5

Includes all plants capable* of burning coal (design fuel and/or current fuel).

* Does not differentiate between types of firing -- assumes all types capable of refuse burning.
** Includes all plants in the Data Tables except 95.

YEAR: 1971
STATE: MINNESOTA

REFUSE COMBUSTION FOR POWER GENERATION

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} $\frac{BTU}{yr}$	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANS. DISTANCE MILES
MINNEAPOLIS-ST. PAUL SMSA													
94. ISLAND Northern States Power Co.	20	1	.02		-	-	100	*	*	*		-	<5
					des. p. coal/gas								
95. SOUTHEAST Northern States Power Co.												20	<5
Boiler 1 2 3	30	10	0.74		-	29	71						
					des. oil/gas								
96. KING Northern States Power Co.												1315	10
Boiler 1	598.4 598.4	62	30.98		100	-	-						
					des. p. coal								

* No FPC-67 Filed

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: MINNESOTA

SMSA-COUNTY/PLANT		RATED CAPACITY	LOAD FACTOR	ENERGY RQMT.	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU %			BOTTOM ASH HANDLING	AIR POLLUTION CONTROL		INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY"	TYPICAL TRANS. DISTANCE
		MW	%	10^{12} $\frac{BTU}{yr}$		COAL	OIL	GAS		TYPE	EFF. %		tons/day	MILES
MINNEAPOLIS-ST. PAUL SMSA (Cont'd.)														
97. HIGH BRIDGE Northern States Power Co.														
Boiler	1	80			RFRO/GFRO				None	None	-	1924	190	10
	3	80			RFRO/GFRO				None	None	-	1924	190	
	5	80			RFRO/GFRO				None	None	-	1924	190	
	7	80			RFRO/GFRO				None	None	-	1924	190	
	2	35			RFRO/GFRO				None	None	-	1924	86	
	4				RFRO/GFRO				None	None	-	1924		
	6				RFRO/GFRO				None	None	-	1924		
	8				RFRO/GFRO				None	None	-	1924		
	9	60			PCFR/GFRO				Dry	E	94(d)	1942	145	
	10	60			PCFR/GFRO				Dry	E	94(d)	1944	145	
	11	113.6			PCFR/GFRO				Dry	E	98(d)	1956	275	
	12	163.2			PCFR/GFRO				Dry	E	96.9(d)	1959	395	
		463.8	58	26.50		38	2	60						

des. p.coal/oil/gas

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: MINNESOTA

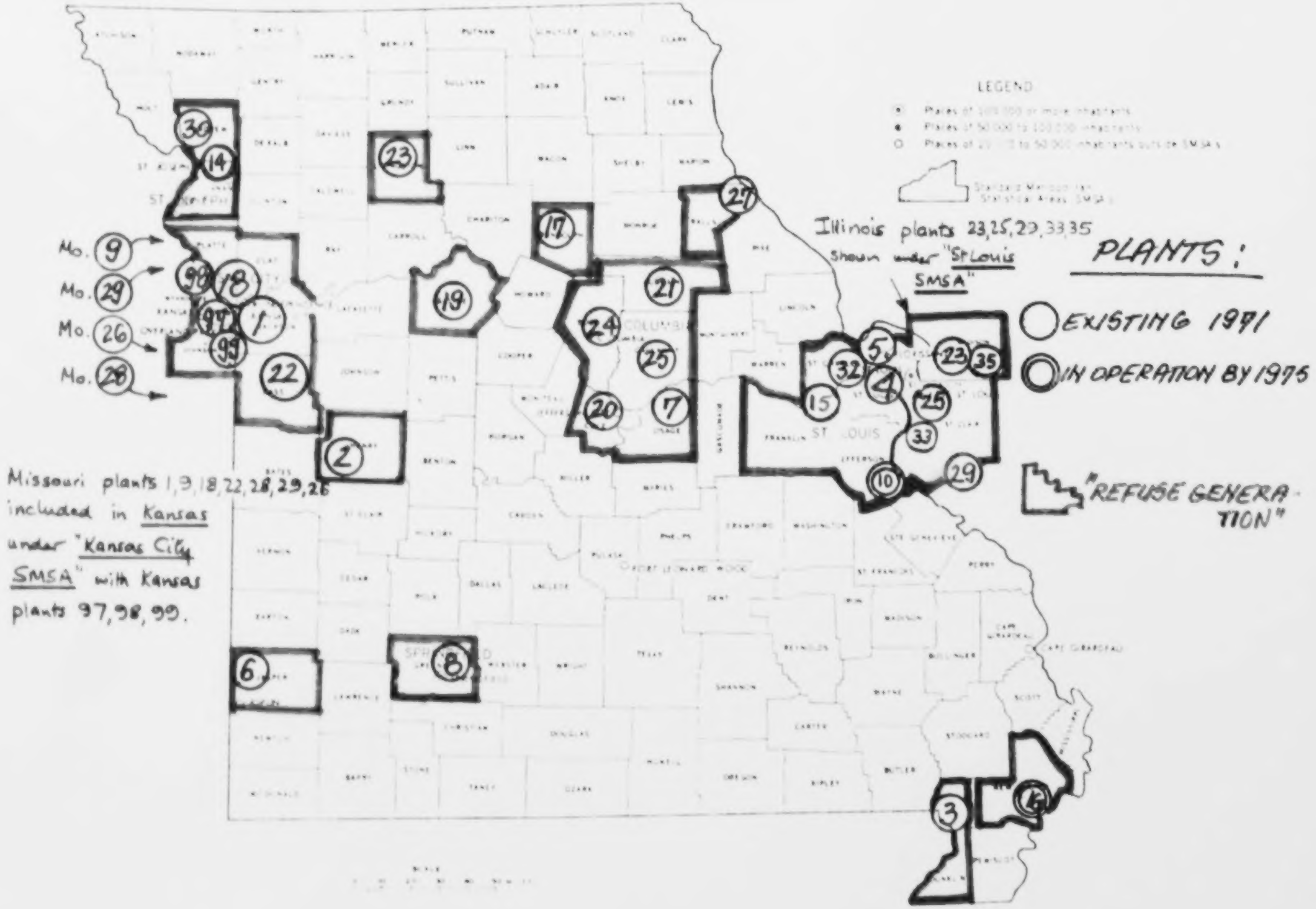
SMSA-COUNTY/PLANT		RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} BTU/yr	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANS. DISTANCE MILES
MINNEAPOLIS/ST. PAUL SMSA (Cont'd.)														
98. RIVERSIDE Northern States Power Co.														<5
Boiler	1	35			OSTO/GFRO				Dry	Cycl	94(d)	1938	80	
	3				OSTO/GFRO				Dry	Cycl	94(d)	1938		
	5	35			OSTO/GFRO				Dry	Cycl	94(d)	1938	80	
	2				OSTO/GFRO				Dry	Cycl	94(d)	1938		
	4	35			OSTO/Gfro				Dry	Cycl	94(d)	1938	80	
	8	239.4			Cycl				Wet	E	98(d)		550	
	7	68.5			PCFR/GFRO				Dry	E	98(d)		155	
	6	68.5			PCFR/GFRO				Dry	E	98(d)		155	
	13	72			GOPP/ROPP				Dry	None	-	1918	165	
	14				GOPP/ROPP				Dry	None	-	1918		
	15				GOPP/ROPP				Dry	None	-	1918		
	16				GOPP/ROPP				Dry	None	-	1918		
	17				GOPP/ROPP				Dry	None	-	1918		
	18				GOPP/ROPP				Dry	None	-	1918		
	19				GOPP/ROPP				Dry	None	-	1918		
	20				GOPP/ROPP				Dry	None	-	1918		
	21				GOPP/ROPP				Dry	None	-	1918		
	22				GOPP/ROPP				Dry	None	-	1918		
		449.9	53	24.42		74	2	24						

* des. p. and s. coal/oil/gas

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: MINNESOTA

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} BTU/yr	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANS. DISTANCE miles
Minneapolis-St. Paul SMSA cont'd													
99. Black Dog Northern States Power Company													
Boiler 1	81			PCTA/GTAN				Dry	E	94	1952	170	10
2	112.5			PCFR/GFRO				Dry	E	94	1954	4465	
3	113.6			PCFR/GFRO				Dry	E	94	1955	6580	
4	179.5			PCFR/GFRO				Dry	E	94	1960	8840	
	486.7	53	24.16		47	-	53						
					des p. coal/gas								
AREA TOTAL	2048.8		106.82										


LEGEND
Places of 100 000 or more inhabitants
Places of 50 000 to 100 000 inhabitants
Places of 25 000 to 50 000 inhabitants outside SMSA's
Standard Metropolitan Statistical Areas (SMSA's)
ST. LOUIS
COLUMBIA
SPRINGFIELD
ST. JOSEPH
Mo. 9
Mo. 29
Mo. 26
Mo. 28
30
14
23
17
27
19
21
24
25
20
7
98
18
97
1
99
22
2
5
32
4
23
35
15
25
33
10
29
6
8
3
16

PLANTS:

○ EXISTING 1971

◎ IN OPERATION BY 1975

"REFUSE GENERATION"

Illinois plants 23,25,29,33,35 shown ~~under~~ under "St Louis SMSA"

Missouri plants 1,9,18,22,28,29,26 included in Kansas under "Kansas City SMSA" with Kansas plants 97,98,99.

REFUSE COMBUSTION FOR POWER GENERATION
Missouri, 1971 - All Fossil Fuel Plants

AREA	RATED CAPACITY MW	(b) ENERGY RQMT. 10^{12} $\frac{\text{BTU}}{\text{yr}}$	AREA POP. millions	(a) REFUSE GENERATION		POTENTIAL ENERGY SUPPLY FROM REFUSE (a/b %)	TYPICAL TRANSPORTATION DISTANCE miles
				10^6 $\frac{\text{Tons}}{\text{yr}}$	10^{12} $\frac{\text{BTU}}{\text{yr}}$		
Columbia SMSA (inc. Cole Co., Osage Co., Callaway Co., Andrain Co.)	218.7	8.1	0.195	0.12	1.15	14.0	27
Kansas City SMSA	2395.8	91.3	1.283	0.84	7.60	8.3	8
St. Joseph SMSA (incl. Andrew Co.)	193.0	16.0	0.100	0.06	0.59	3.7	5
St. Louis SMSA	5096.3	237.5	2.398	1.57	14.18	6.0	16
Springfield SMSA	253.0	11.3	0.156	0.10	0.92	8.1	< 5
Dunklin County	34.5	1.7	0.034	0.02	0.18	10.3	10
Henry County	563.1	31.3	0.019	0.01	0.10	0.3	10
Jasper County	212.8	12.1	0.081	0.04	0.43	3.5	10
Livingston County	15.0	0.7	0.016	0.00	0.09	11.5	5
Ralls County	34.0	0.4	0.008	0.01	0.04	9.3	10
Randolph County	447.0	26.2	0.023	0.01	0.12	0.5	10
Saline County	30.5	0.8	0.025	0.01	0.13	15.1	10
MISSOURI STATE TOTALS	9493.7	437.9	4.338	2.84	25.53	5.8	

REFUSE COMBUSTION FOR POWER GENERATION

Missouri, 1971 - "Coal Plants" only*

AREA	RATED CAPACITY MW	(b) ENERGY RQMT. 10^{12} $\frac{\text{BTU}}{\text{yr}}$	AREA POP. millions	(a) REFUSE GENERATION 10^6 $\frac{\text{tons}}{\text{yr}}$	(a) REFUSE GENERATION 10^{12} $\frac{\text{BTU}}{\text{yr}}$	POTENTIAL ENERGY SUPPLY FROM REFUSE (a/b %)	TYPICAL TRANSPORTATION DISTANCE miles
Columbia SMSA (incl. Cole Co., Osage Co., Callaway Co., Andrain Co.)	187.0	6.3	0.195	0.12	1.15	18.0	27
Kansas City SMSA	2262.8	89.3	1.283	0.84	7.6	8.5	8
St. Joseph SMSA (incl. Andrew Co.)	193.0	16.0	0.100	0.06	0.59	3.7	5
St. Louis SMSA	5041.3	237.4	2.398	1.57	14.18	6.0	16
Springfield SMSA	253.0	11.3	0.156	0.10	0.92	8.1	< 5
Dunklin County	-	-	0.034	0.02	0.18	-	
Henry County	563.1	31.3	0.019	0.01	0.10	0.3	10
Jasper County	212.8	12.1	0.081	0.04	0.43	3.5	10
Livingston County	15.0	0.7	0.016	0.00	0.09	11.5	5
Ralls County	34.0	0.4	0.008	0.01	0.04	9.3	10
Randolph County	447.0	26.2	0.023	0.01	0.12	0.5	10
Saline County	30.5	0.8	0.025	0.01	0.13	15.1	10
MISSOURI STATE TOTALS	9239.5	432.4	4.338	2.84	25.53	5.9	

* Includes all plants in the Data Tables except 3, 20, 21, 29.

REFUSE COMBUSTION FOR POWER GENERATION

MISSOURI
1971

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} $\frac{BTU}{yr}$	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANS. DISTANCE miles
Kansas City SMSA													
1. Hawthorn (Kansas City Power and Light)													
Boiler 1	69			PCTA/ GTAN				DRY	MCAX	85	1951	135	< 5
2	69			PCTA/ GTAN				DRY	MCAX	85	1951	135	
3	112.5			PCTA/ GTAN				DRY	MCAX	NR/99	1953	225	
4	142.8			PCTA/ GTAN				DRY	MCAX	NR/99	1955	285	
5	514.8			PCTA/ GTAN				DRY	E		1969	1030	
	908.1	49	42.97		55	-	45						
					des.p. coal, gas								
18. Sibley (Missouri Public Service)													
Boiler 1	50			CYCL	100			WET	MCAX	NR	1960	55	22
2	50			CYCL	100			WET	MCAX/E	NR/99	1962	55	
3	418.5			CYCL	100			WET	E	99	1969	495	
	518.5	30	14.48		100	-	-						
					des.p.coal								
22. R.J. Green (Missouri Public Service Co.)													
Boiler 1	24.5			GFRO				DRY	MCAX	94	1954	35	25
2	25.0			PCFR				DRY	MCAX	94	1958	35	
	49.5	[illegible]	1.73		1		99						
					des.p.coal		gas						

REFUSE COMBUSTION FOR POWER GENERATION

MISSOURI
1971

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} BTU/yr	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANS. DISTANCE miles
Kansas City SMSA cont'd													
28. Grand Avenue (Kansas City Power and Light) Boiler 1 *				GFRO/ RFRO				NONE	NONE	-	1968		10
5				GTAN/ OSTO				DRY	CYCL/C		1930		
6				GTAN/ PCTA				DRY	CYCL/C	99	1944		
7				GTAN/ PCTA				DRY	CYCL/C	99	1950		
8				GTAN/ PCTA				DRY	CYCL/C	99	1948		
	126.8	14	2.26		37		63					95	
					des. p.coal	oil	gas						
9. Missouri City (Chameron) (NW Electric Power Corp.) Boiler 1	20			PCFR				WET	MCTA	52 (t)	1953	55	20
2	20			RFRO				WET	MCTA	52 (t)	1953	55	
	40	59	2.77		92	8							
					des.p. coal	oil							

* Common header system.

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: MISSOURI

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} $\frac{BTU}{yr}$	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANS. DISTANCE Miles
Kansas City SMSA cont'd													
KS 99. Kaw River (Kansas City Board of Pub. Utilities)													
Boiler 1	46			GFRO/PCFR				Wet	MCAX	85	1955	115	5
2	50			GFRO/PCFR				Wet	MCAX	85	1957	125	
3	65.3			CYCL				Wet	E	97	1962	165	
	161.3	58	9.54		22	-	78						
					des p. coal/gas								
KS 98. Quindaro No, 2* (Kansas City Bd. of Pub.Utilities)													
Boiler 17	60*			GFRO/PCFR				Wet	None	-	1932	105	<5
18				GFRO/PCFR				Wet	None	-	1933		
19				GFRO/PCFR				Wet	None	-	1938		
20				GFRO/PCFR				Wet	None	-	1942		
21				GFRO/PCFR				Wet	MCAX	85	1946		
22	34.5			GFRO/PCFR				Wet	MCAX	85	1952	60	
	94.5	29	4.04		37	-	63						
					des. p. coal/gas								

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* Common steam header

YEAR: 1971
STATE: MISSOURI

REFUSE COMBUSTION FOR POWER GENERATION

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} $\frac{BTU}{yr}$	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANS. DISTANCE Miles
Kansas City SMSA cont'd													
KS 97. Quindaro No.3 Kansas City Board of Pub. Utilities													<5
Boiler 1	81.6			CYCL				Wet	E	98	1966	95	
2	157.5			PCFR				Dry	E	99.35	1971	190	
	239.1	25	6.70		37	-	63						
					des p. coal/gas								
26. Blue Valley Independence City Power & Light													8
Boiler 1								Wet					
2								Wet					
3								Wet				205	
	125	40	4.87		10	-	90						
					des. coal/oil/gas								

REFUSE COMBUSTION FOR POWER GENERATION

MISSOURI
1971

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} BTU/yr	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANS. DISTANCE miles
Kansas City SMSA cont'd													
29. Northeast (Kansas City Power and Light)													
Boiler 9				RFRO/ GFRO				None	None	-	1922	Yes	<5
10				RFRO/ GFRO				"	"	-	1929		
11				RFRO/ GFRO				"	"	-	1922		
12				RFRO/ GFRO				"	"	-	1929		
13 Common Steam Header				RFRO/ GFRO				"	"	-	1923		
14				GFRO				"	"	-	1937		
15				RFRO/ GFRO				"	"	-	1923		
16				GFRO				"	"	-	1950		
	133	10	1.94		— des.	2 oil	98 gas					85	
AREA TOTAL	2395.6		31.30										
Henry County													
2. Montrose (Kansas City Power and Light)													
Boiler 1	187.5			PCTA	100			DRY	E	95	1958	435	10
2	187.5			PCTA	100			DRY	E	99.5	1960	435	
3	188.1			PCTA	100			DRY	E	99.5	1964	440	Kansas City 60
	563.1	58	31.34		100 des.p. coal	—	—						
AREA TOTAL	563.1		31.34										

YEAR: 1971
STATE: MISSOURI

REFUSE COMBUSTION FOR POWER GENERATION

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} $\frac{BTU}{yr}$	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANS. DISTANCE Miles
St. Joseph SMSA - Andew Co.													
14. Lake Road (St. Joseph Light & Power Co.)													
Boiler 1	60.5*			GFRO/RFRO				Dry	None		1961		<5
2				GFRO/RFRO				Dry	None		1961		
3				GFRO/RFRO				Dry	None		1938		
4				GFRO/RFRO/PCFR				Dry	MCAX	85(d)	1950		
5				GFRO/RFRO/PCFR				Dry	MCAX	85.7 (d)	1957		
6	90			GFRO/CYCL				Dry	MCAX	70(d)	1967		
	150.5	[illegible]	13.96		8	-	92					590	
					des coal/oil/gas								
30. Edmond Street (St. Joseph Lgt. & Power Co.)													
Boiler 16	42.5*			SPRE/RFRO/GFRO				Dry	MCTA	93	1950		<5
17				SPRE/RFRO/GFRO				Dry	MCTA	93	1950		
18				RFRO/GFRO				Dry	None	-	1955		
20				ROPP/GFRO				Dry	None	-	1962		
19				RFRO/GFRO				Dry	None	-	1957		
	42.5	[illegible]	2.11		-	5	95					85	
					des coal/oil/gas								
AREA TOTAL	193.0		16.07										

* Header system, boilers not directly associated

REFUSE COMBUSTION FOR POWER GENERATION

MISSOURI
1971

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} BTU/yr	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANS. DISTANCE miles
Randolph County													
17. Thomas Hill													
(Assoc. Electric Corp.)													
Boiler 1	175			CYCL	100			DRY	E	96.5	1966	435	10
2	272			CYCL	100			DRY	E	95.3	1966	680	
	447	68	26.29		100	–	–						
					des. coal								Columbia 50
AREA TOTAL	447.0		26.29										
Saline County													
19. Marshall													
(Marshall Municipal Utility)	30.5	27	0.86		6	–	94	*	*	*		35	10
					des. coal	oil	gas						Columbia 50 Kansas City 75
AREA TOTAL	30.5		0.86										

* No FPC-67 Filed.

REFUSE COMBUSTION FOR POWER GENERATION

MISSOURI
1971

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} BTU/yr	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANS. DISTANCE miles
Livingston County													
23. Chillicothe (Chillicothe Municipal Util.)	15	50	0.78		100 des. s. coal	-	-	*	*	*		30	5
AREA TOTAL	15.0		0.78										St Joseph 60 Kansas City 70
Ralls County													
27. Hannibal (Hannibal Board of Public Works)	34	12	0.43		85 des. p. coal	-	15	*	*	*		15	10
AREA TOTAL	34.0		0.43										St Louis 95
St. Louis SMSA													
4. Meramec (Union Electric)													
Boiler 1	137.5			PCTA				DRY	E	98	1953	305	10
2	137.5			PCTA				DRY	E	98/83(d)	1954	305	
3	289			PCFR				DRY	E	98	1959	645	
4	359			PCFR				DRY	E	98	1961	800	
	923	58	48.16		92 des.p. coal	-	8 gas						
Ill.29. Baldwin, Illinois (Illinois Power Company)													
Boiler 1	623.1				100	-	-						
	623.1	62	33.13	CYCL	100 des. coal	-	-	WET	E	97	1970	1405	45

* No FPC-67 filed

YEAR: 1971
STATE: MISSOURI

REFUSE COMBUSTION FOR POWER GENERATION

SMSA-COUNTY/PLANT		RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} BTU/yr	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANS. DISTANCE Miles
St. Louis SMSA cont'd														
ILL23. Wood River, Illinois (Illinois Power Company)														15
	Boiler 1	150			PCTA				Dry	Grav	15	1949 - 1950	395	
	2				PCTA				Dry	Grav	15			
	3				PCTA				Dry	Grav	15			
	4	113.1			PCTA				Dry	C	99.3(t)	1954	300	
	5	387			PCTA				Dry	C	99.1(t)	1964	1025	
		650.1	70	40.68		76	-	24						
						des. p. coal gas								
5. Sioux (Union Electric)														15
	Boiler 1	549.8			CYCL	100			W	E	98	1967	1035	
	2	549.8			CYCL	100			Wet	E	98	1968	1035	
		1099.6	49	48.85		100	-	-						
						des. p. coal								
15. Labadie (Union Electric)														30
	Boiler 1	620.5			PCTA	100			Dry	E	99	1970	940	
	2	555			PCTA	100			Dry	E	99	1971	840	
		1175.5	40	38.79		100	-	-						
						des. p. coal								
32. Ashley (Union Electric Co.)		70*	4	1.45	PCFR		83	17	Dry	E	95	1940-1949	25	<5

* Boilers 2,3,4,5,6: common steam header. All five boilers similarly equipped.

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: MISSOURI

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} $\frac{BTU}{yr}$	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANS. DISTANCE Miles
ST. LOUIS SMSA-cont'd													
III.33. Cahokia (Union Electric)													
Boiler 1				RFRO				Dry	-	-	1923		5
2				RFRO				Dry	-	-	1923		
3				RFRO				Dry	-	-	1923		
4				RFRO				Dry	-	-	1923		
5				RFRO				Dry	-	-	1923		
6				RFRO				Dry	-	-	1923		
7				RFRO				Dry	-	-	1923		
8				RFRO				Dry	-	-	1923		
9				RFRO				Dry	-	-	1924		
10				RFRO				Dry	-	-	1924		
11				RFRO				Dry	-	-	1924		
12				RFRO				Dry	-	-	1924		
13				RFRO				Dry	-	-	1925		
14				RFRO				Dry	-	-	1925		
15				RFRO				Dry	-	-	1925		
16				PCFR				Dry	-	-	1927		
17				PCFR				Dry	E	95	1927		
18				PCFR				Dry	E	95	1927		
19				PCFR				Dry	E	95	1937		
20				PCFR				Dry	E	95	1937		
21				PCFR				Dry	E	95	1937		
22				PCFR				Dry	E	95	1937		
23				PCFR				Dry	E	95	1937		
24				PCFR				Dry	E	95	1937		
	300	16	4.25		-	-	100						

des.p-coal/oil

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: MISSOURI

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} $\frac{BTU}{yr}$	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANS. DISTANCE Miles
ST. LOUIS SMSA-cont'd													
Ill. 35. Highland* (Highland Electric Light)	16.6	22	0.44		100 des.s-coal	-	-	*	*	*		15	30
Ill. 25. Venice, Illinois (Union Electric Company) Venice #1													
Boiler 1								None	None	-	1960		<5
2								None	None	-	1960		
3								None	None	-	1960		
4								None	None	-	1960		
5	common steam header							None	None	-	1960		
7				**				None	None	-	1925		
8								None	None	-	1925		
9								None	None	-	1925		
10								None	None	-	1925		
11								None	None	-	1925		
12								None	None	-	1929		
	55	0.9	0.06		- des. oil/gas	-	100						

* NoFPC-67 filed
** All boilers front-fired

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: MISSOURI

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} BTU/yr	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANS. DISTANCE Miles
ST. LOUIS SMSA-cont'd													
Ill. 25. Venice, Illinois-cont'd													
(Union Electric Company)													
Venice #2													
Boiler 1				PCFR				Dry	E	96	1942		<5
2				PCFR				Dry	E	96	1942		
3				PCFR				Dry	E	96	1943		
4	common			PCFR				Dry	E	96	1943		
5	steam			PCFR				Dry	E	96	1948		
6	header			PCFR				Dry	E	96	1948		
7				Top-fired				Dry	E	96	1950		
8				Top-fired				Dry	E	96	1950		
	500	45	26.38		67 des.p.coal	-	33 gas					1125	
AREA TOTAL	5096.3		237.5										

REFUSE COMBUSTION FOR POWER GENERATION

MISSOURI
1971

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. $10^{12}\frac{BTU}{yr}$	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANS. DISTANCE miles
Columbia SMSA-Callaway County, Cole County, Osage County													
7. Chamois (Central Electric Power Corp.)	67.7	64	4.29	*	100 des. p. coal	-	-	*	*	*	1954	180	35
20. Jefferson City (Missouri Power and Light)	12.7	3	0.04	*	- des.	-	100 gas	*	*	*		-	25
21 Mexico (Missouri Power and Light)	19	88	1.76	*	- des.	-	100 gas	*	*	*		70	30
24. Columbia (Columbia Water and Light)	107.8	15	1.70	*	100 des. s. coal	-	-	*	*	*		70	<5
25. Fulton (Fulton Dept. of Utilities)	11.5	34	0.4	*	100 des. s. coal	-	-	*	*	*		15	25
AREA TOTAL	218.7		8.19										

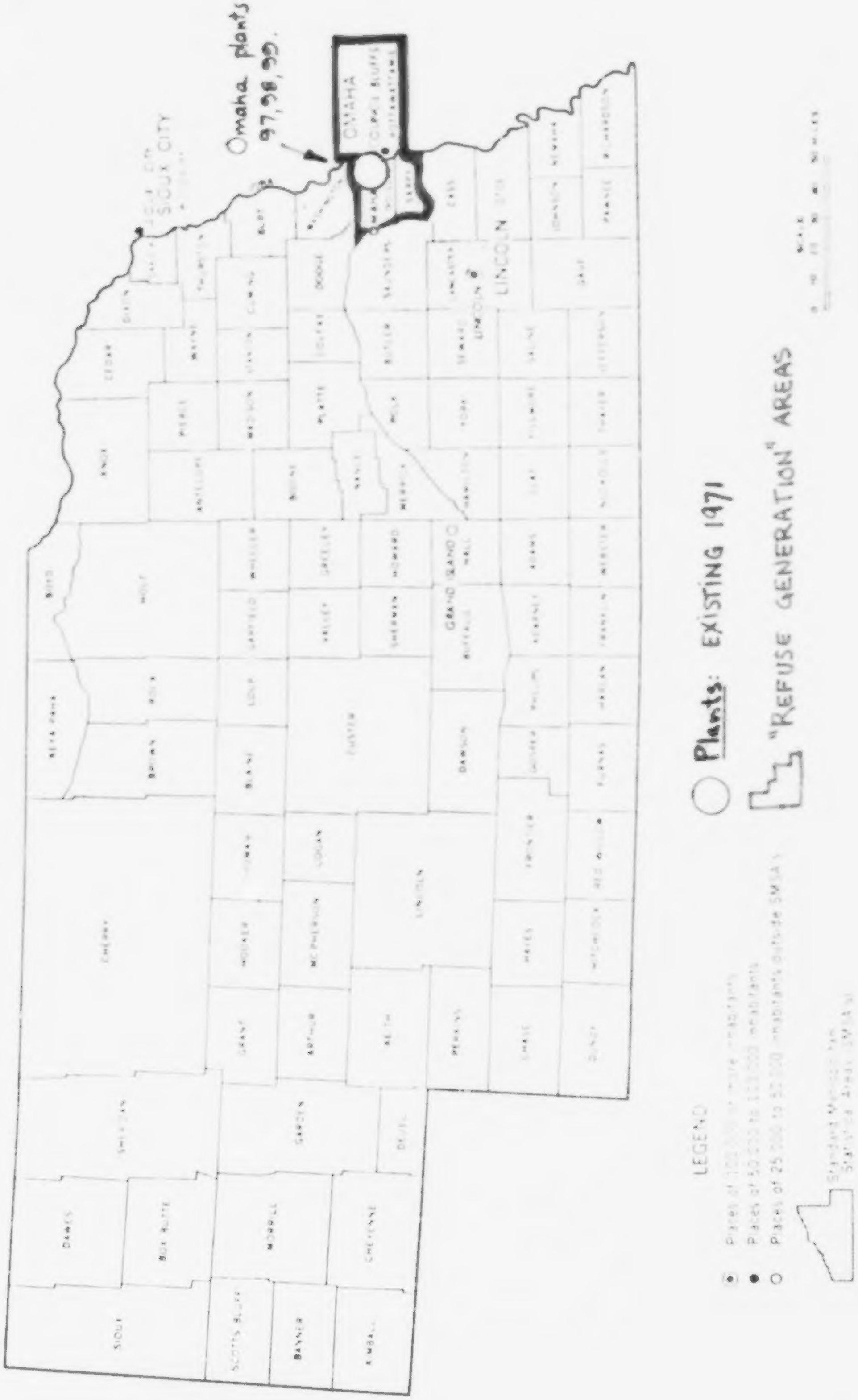
* No FPC-67 Filed.

REFUSE COMBUSTION FOR POWER GENERATION

MISSOURI
1971

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} $\frac{BTU}{yr}$	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANS. DISTANCE miles
Dunklin County													
3. Jim Hill (Ark.-Miss. Power Co.)	34.5	48	1.74	*	- des.	5 oil	95 gas	*	*	*	1950	70	10
AREA TOTAL	34.5		1.74										Poplar Bluff 20
Springfield SMSA													
8. James River (Springfield City Util.)													
Boiler 1	22			GTAN/PCTA				DRY	CYCL	88	1952	40	< 5
2	22			GTAN/PCTA				DRY	CYCL	88	1957	40	
3	44			GFRO/PCFR				DRY	CYCL	87	1960	80	
4	60			GFRO/PCFR				DRY	CYCL	87	1964	110	
5	105			GFRO/PCFR				DRY	E	98	1970	200	
	253	44	11.32		9 des. coal	-	91 gas						
AREA TOTAL	253.0		11.32										
Jasper County													
6. Asbury (Empire District Electricals)													
Boiler 1	212.8	63	12.15	CYCL	100 des. coal oil			WET	E	92	1970	515	10
AREA TOTAL	212.8		12.15										Springfield 80

* No FPC-67 Filed.


Omaha plants 97,98,99.
SIOUX CITY
OMAHA
COUNCIL BLUFFS
LINCOLN
GRAND ISLAND
Plants: EXISTING 1971
"REFUSE GENERATION" AREAS
LEGEND
Places of 100,000 or more inhabitants
Places of 50,000 to 100,000 inhabitants
Places of 25,000 to 50,000 inhabitants outside SMSA's
Standard Metropolitan Statistical Areas (SMSA's)
SIOUX
DAWES
BOX BUTTE
SHERIDAN
SCOTTS BLUFF
BANNER
KIMBALL
MORRILL
CHEYENNE
GARDEN
DEUEL
CHERRY
KEYA PAHA
BROWN
ROCK
BOYD
HOLT
KNOX
CEDAR
DIXON
DAKOTA
THURSTON
WAYNE
PIERCE
ANTELOPE
MADISON
STANTON
CUMING
BURT
WASHINGTON
DOUGLAS
SARPY
DODGE
COLFAX
PLATTE
BOONE
NANCE
MERRICK
POLK
BUTLER
SAUNDERS
CASS
OTOE
LANCASTER
SEWARD
YORK
HAMILTON
HALL
BUFFALO
CUSTER
DAWSON
LINCOLN
KEITH
PERKINS
CHASE
DUNDY
HAYES
HITCHCOCK
FRONTIER
RED WILLOW
GOSPER
FURNAS
PHELPS
HARLAN
KEARNEY
FRANKLIN
ADAMS
WEBSTER
CLAY
NUCKOLLS
FILLMORE
THAYER
SALINE
JEFFERSON
GAGE
JOHNSON
PAWNEE
NEMAHA
RICHARDSON
WHEELER
GARFIELD
GREELEY
VALLEY
HOWARD
SHERMAN
LOUP
BLAINE
THOMAS
HOOKER
GRANT
LOGAN
MC PHERSON
ARTHUR

REFUSE COMBUSTION FOR POWER GENERATION
Nebraska, 1971 - Omaha SMSA

AREA	RATED CAPACITY MW	(b) ENERGY RQMT. 10^{12} $\frac{BTU}{yr}$	AREA POP. millions	(a) REFUSE GENERATION 10^6 $\frac{tons}{yr}$		POTENTIAL ENERGY SUPPLY FROM REFUSE (a/b %)	TYPICAL TRANS. DISTANCE miles
				10^6 $\frac{tons}{yr}$	10^{12} $\frac{BTU}{yr}$		
All Fossil Fuel Plants							
Omaha SMSA	794.2	39.23	.552	.362	3.264	8.3	5
"Coal Plants" only**							
Omaha SMSA	774.2	38.93	.552	.362	3.264	8.4	5

Includes all plants capable* of burning coal (design fuel and/or current fuel). Includes all plants in attached data sheets

* Does not differentiate between types of firing--assumes all types capable of refuse burning.

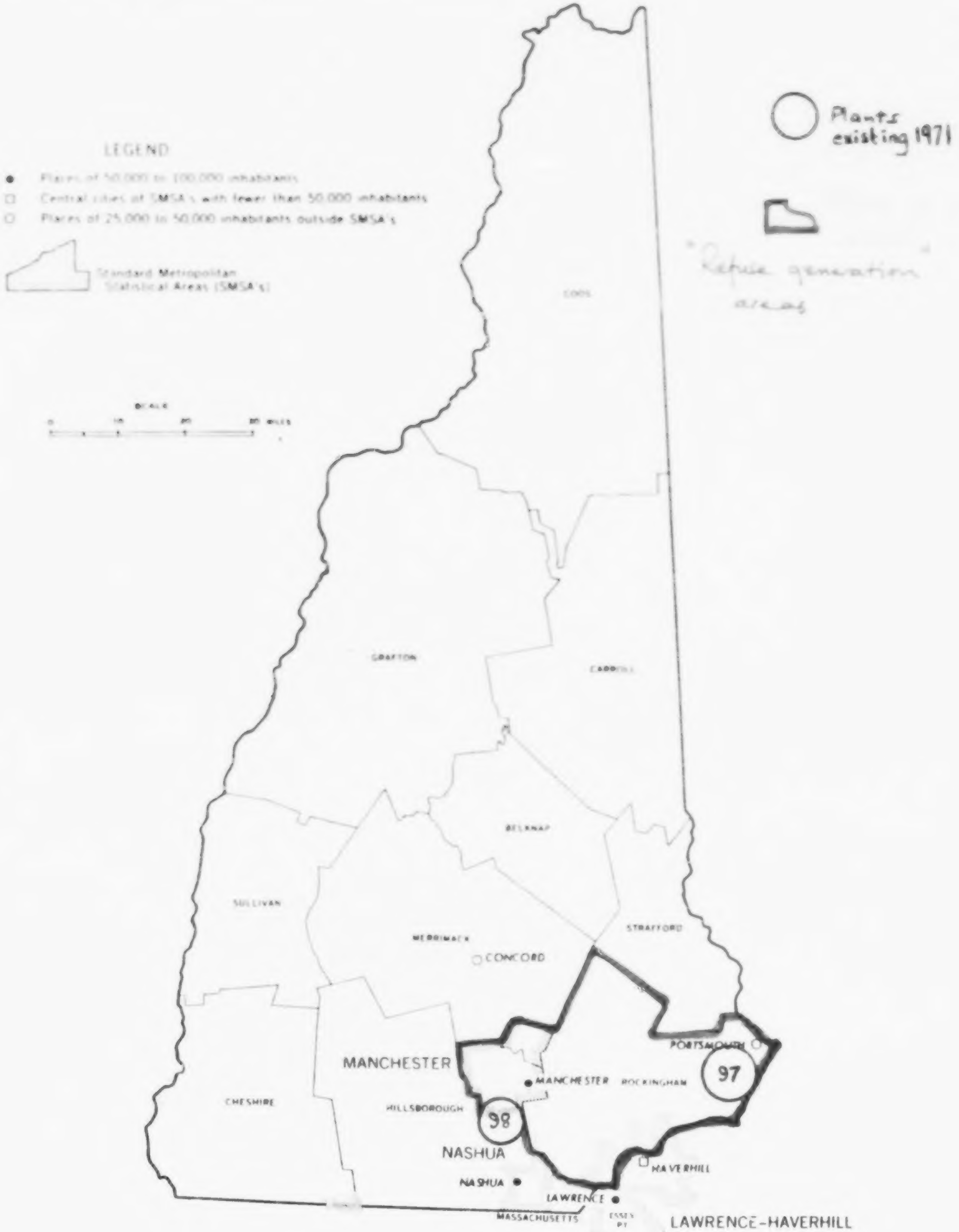
** Includes all plants in the Data Tables except 98.

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: NEBRASKA

SMSA-COUNTY/PLANT	RATED CAPACITY	LOAD FACTOR	ENERGY RQMT.	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU %			BOTTOM ASH HANDLING	AIR POLLUTION CONTROL		INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY"	TYPICAL TRANS. DISTANCE
	MW	%	10^{12} $\frac{BTU}{yr}$		COAL	OIL	GAS		TYPE	EFF. %		tons/day	Miles
OMAHA SMSA													
99. North Omaha													
Omaha Public Power District													
Boiler 1	73.5			PCTA				Dry	C	96	1954	165	5
2	108.8			PCTA				Dry	C	96	1957	245	
3	108.8			PCTA				Dry	C	96	1959	245	
4	136.0			PCTA				Dry	E	96	1963	305	
5	217.6			PCFR				Dry	E	98.8	1968	490	
	600.7	61	38.23		43	-	57						
					des.p.coal/gas								
98. South Omaha													
Omaha Public Power District	20	14	0.3		17	-	83	*	*	*		10	5
					des. oil/gas								
97. Jones Street Station													
Omaha Public Power District													
Boiler 20				OSTO				Dry	None	-	1920		5
21				OSTO				Dry	None	-	1923		
22	65**			OSTO				Dry	None	-	1923	20	
23				OSTO				Dry	None	-	1925		
24				OSTO				Dry	None	-	1929		
25	25			OSTO				Dry	MCTA	85	1937	5	
26	34.5			OSTO				Dry	MCTA	85	1949	5	
27	49			OSTO				Dry	MCTA	85	1951	10	
	173.5	4	0.70		44	-	56						
					des.s.p. coal/gas								
AREA TOTAL	794.2		39.23										

* No FPC-67 filed.
** header system


LEGEND
● Places of 50,000 to 100,000 inhabitants
□ Central cities of SMSA's with fewer than 50,000 inhabitants
○ Places of 25,000 to 50,000 inhabitants outside SMSA's
Standard Metropolitan Statistical Areas (SMSA's)
SCALE
0
10
20
30 MILES
Plants existing 1971
"Refuse generation" areas
COOS
GRAFTON
CARROLL
BELKNAP
SULLIVAN
MERRIMACK
CONCORD
STRAFFORD
PORTSMOUTH
MANCHESTER
MANCHESTER
ROCKINGHAM
97
CHESHIRE
HILLSBOROUGH
98
NASHUA
NASHUA
HAVERHILL
LAWRENCE
MASSACHUSETTS
ESSEX
LAWRENCE-HAVERHILL

REFUSE COMBUSTION FOR POWER GENERATION
New Hampshire, 1971 - "Coal Plants" only

AREA	RATED CAPACITY MW	(b) ENERGY RQMT. 10^{12} $\frac{BTU}{yr}$	AREA POP. millions	(a) REFUSE GENERATION 10^6 $\frac{tons}{yr}$	10^{12} $\frac{BTU}{yr}$	POTENTIAL ENERGY SUPPLY FROM REFUSE (a/b %)	TYPICAL TRANS. DISTANCE miles
Manchester SMSA (includes Rockingham Co.)	638.0	36.3	0.371	0.24	2.19	6.0	

Includes all plants capable* of burning coal (design fuel and/or current fuel). Includes all plants in attached data sheets.

* Does not differentiate between types of firing -- assumes all types capable of refuse burning.

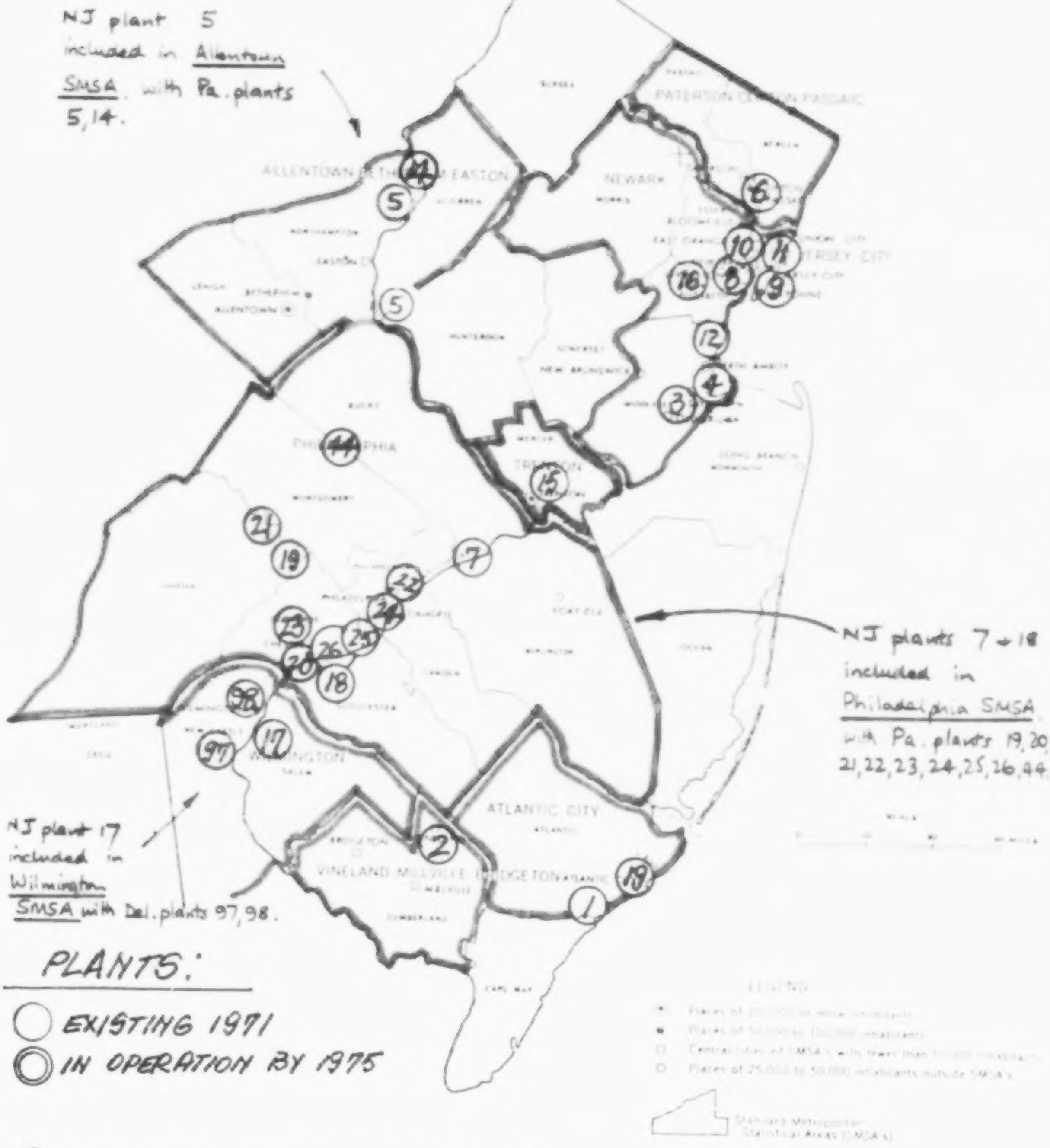
REFUSE COMBUSTION FOR POWER GENERATION
New Hampshire, 1971 - All Fossil Fuel Plants -- Identical to table above.

Note: Data includes Merrimack and Schiller Plants only.

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: New Hampshire

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} BTU/yr	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANS. DISTANCE Miles
Manchester SMSA													
Rockingham Co.													
98. Merrimack Public Service Co. of New Hampshire													
Boiler 1	113.6			CYCL	100	-	-	Wet	E	77.4	1960	250	10
2	345.6			CYCL	100	-	-	Wet	E	92.4	1968	760	
	459.2	61	23.91		100	-	-						
					des coal/oil								
97. Schiller Public Service Co.of New Hampshire													
Boiler 1 }	28.8			RFRO	-	100	-				1968	} 85	10
2 }				RFRO	-	100	-				1968		
4	50			RFRO	-	100	-		C		1952	145	
5	50			RFRO	-	100	-		C		1955	145	
6	50			RFRO	-	100	-				1957	145	
	178.8	68	12.44		-	100	-						
					des coal/oil								
AREA TOTAL	638.0		36.35										


SUSSEX
PASSAIC
PATERSON-CLIFTON-PASSAIC
BERGEN
ALLENTOWN-BETHLEHEM-EASTON
WARREN
NEWARK
MORRIS
EAST ORANGE
JERSEY CITY
NORTHAMPTON
EASTON
LEHIGH
BETHLEHEM
ALLENTOWN
HUNTERDON
SOMERSET
NEW BRUNSWICK
PERTH AMBOY
MIDDLESEX
BUCKS
PHILADELPHIA
MERCER
TRENTON
LONG BRANCH
MONMOUTH
MONTGOMERY
CHESTER
PHILADELPHIA
FORT DIX
BURLINGTON
OCEAN
CAMDEN
GLOUCESTER
NEW CASTLE
WILMINGTON
SALEM
CECIL
ATLANTIC CITY
ATLANTIC
VINELAND-MILLVILLE-BRIDGETON
MILLVILLE
CUMBERLAND
CAPE MAY
14
5
5
6
10
11
16
8
9
12
4
3
44
15
21
19
7
22
24
23
25
26
20
18
98
17
97
2
13
1
LEGEND
Places of 100,000 or more inhabitants
Places of 50,000 to 100,000 inhabitants
Central cities of SMSA's with fewer than 50,000 inhabitants
Places of 25,000 to 50,000 inhabitants outside SMSA's
Standard Metropolitan Statistical Areas (SMSA's)

NJ plant 5 included in Allentown SMSA with Pa. plants 5, 14.

NJ plants 7 + 18 included in Philadelphia SMSA with Pa. plants 19, 20, 21, 22, 23, 24, 25, 26, 44.

NJ plant 17 included in Wilmington SMSA with Del. plants 97, 98.

PLANTS:

○ EXISTING 1971

◎ IN OPERATION BY 1975

"REFUSE GENERATION" AREAS

REFUSE COMBUSTION FOR POWER GENERATION

New Jersey, 1971 - All Fossil Fuel Plants

AREA	RATED CAPACITY MW	(b) ENERGY RQMT. 10^{12} $\frac{BTU}{yr}$	AREA POP. millions	(a) REFUSE GENERATION 10^6 $\frac{tons}{yr}$	10^{12} $\frac{BTU}{yr}$	POTENTIAL ENERGY SUPPLY FROM REFUSE (a/b %)	Typical Trans. Distance miles
Atlantic City SMSA	351.7	21.1	0.177	0.11	1.05	5.0	8
Newark SMSA (incl. Middlesex County)	3977.4	204.6	2.491	1.64	14.73	7.2	<5
Patterson-Clifton-Passaic SMSA	650.4	27.9	1.394	0.91	8.24	29.5	5
Trenton SMSA	652.8	32.0	0.314	0.20	1.86	5.8	<5
Vineland-Millville-Bridgeton SMSA	82.0	3.8	0.125	0.08	0.74	19.1	<5
NEW JERSEY TOTALS	5714.3	289.6	4.501	2.96	26.62	9.19	

Includes all plants detailed on attached data sheets.

REFUSE COMBUSTION FOR POWER GENERATION
New Jersey, 1971 - "Coal Plants" Only

AREA	RATED CAPACITY MW	(b) ENERGY RQMT. $10^{12}\frac{BTU}{yr}$	AREA POP. millions	(a) REFUSE GENERATION $10^6\ \frac{tons}{yr}$	$10^{12}\ \frac{BTU}{yr}$	POTENTIAL ENERGY SUPPLY FROM REFUSE (a/b %)	Typical Trans. Distance miles
Atlantic City SMSA	351.7	21.1	0.177	0.11	1.05	5.0	8
Newark SMSA (incl. Middlesex County)	3458.0	178.8	2.491	1.64	14.73	8.2	<5
Patterson-Clifton-Passaic SMSA	650.4	27.9	1.394	0.91	8.24	29.5	5
Trenton SMSA	652.8	32.0	0.314	0.20	1.86	5.8	<5
Vineland-Millville-Bridgeton SMSA	82.0	3.8	0.125	0.82	0.74	19.1	<5
NEW JERSEY STATE TOTALS	5194.9	263.8	4.501	2.96	26.62	10.1	

Includes all plants capable* of burning coal (design fuel and/or current fuel). Includes all plants in attached data sheets except No. 16.

* Does not differentiate between types of firing -- assumes all types capable of refuse burning.

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: New Jersey

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} $\frac{BTU}{yr}$	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	Typical Trans Distance miles
Newark SMSA-Middlesex County													
9. Hudson													
Public Service Electric & Gas													
Boiler 1	454.8			CYCL				Wet	E	97.6	1964	780	<5
2	659.7			PCOP				Dry	E	98	1968	1135	
	1114.5	47	45.04		38	40	22						
					des.p.	coal oil	gas						
11. Marion													
Public Service Electric & Gas													
Boiler 51	62.5			RFRO	-	100	-	-	E	95(d)	1941	135	<5
52	62.5			RFRO	-	100	-	-	E	95(d)	1941	135	
	125	42	6.46		-	100	-						
					des.p.coal	oil							
8. Essex													
Public Service Electric & Gas													
Boiler 1				RFRO				-	E	93(d)	1947		<5
17				RFRO				-	-	-	1923		
18				RFRO				-	-	-	1923		
19				RFRO				-	-	-	1924		
20				RFRO				-	-	-	1924		
21				RFRO				-	-	-	1924		
22				RFRO				-	-	-	1924		
23				RFRO				-	-	-	1924		
24				RFRO				-	-	-	1924		
25				RFRO				-	E	90(d)	1938		
26				RFRO				-	E	90(d)	1938		
	336.8	36	17.05		-	97	3					725	
					des.p.coal	oil	gas						

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: New Jersey

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} BTU/yr	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	Typical Trans. Distance Miles
Newark SMSA-Middlesex County cont'd													
10. Kearny "B"*													
Public Service Electric & Gas													
Boiler 1	157			RTAN	-	100	-	-	C	97(d)	1953	305	<5
2	157			RTAN	-	100	-	-	C	97(d)	1953	305	
	598.6	**51	33.48		-	100	-						
					des.p.coal	oil							
16. Linden													
Public Service Electric & Gas													
Boiler 11	259.7			RFRO	-	100	-	-	-	-	1957	385	
12	259.7			RFRO	-	100	-	-	-	-	1957	385	<5
13	259.7			RFRO	-	100	-	-	-	-	1957	385	
2	259.7			RFRO	-	100	-	-	-	-	1957	385	
	519.4	47	25.73		-	100	-						
					des	oil							
12. Sewaren													
Public Service Electric & Gas													
Boiler 1	103			RTAN				-	C	95(d)	1948	240	<5
2	107			RTAN				-	C	95(d)	1948	250	
3	103			RTAN				-	C	95(d)	1949	240	
4	119			RTAN				-	C	97(d)	1949	275	
5	388			RFRO				-	-	-	1962	905	
	820	58	46.77		-	97	3						
					des.p.coal	oil	gas						

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* Total Rated Capacity figure (598.6) uprated from 314.1MW during the period 1971-73 because boilers 41-43 and 51-53 from Kearny "A" have been included prior to retirement in 1973. Boilers 11-13, 21-23, 31-33 from Kearny "A" were retired in 1971. Each boiler from Kearny "A" was an "RFRO" boiler burning oil, with no operable ash handling or pollution control equipment, and all were constructed during the period 1925-28.

** State average

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: New Jersey

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} BTU/yr	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	Typical Trans. Distance miles
Newark SMSA-Middlesex County (cont'd)													
4. Werner Jersey Central Power & Light													
Boiler 1				RFRO	-	100	-				1930		
2				RFRO	-	100	-				1930		<5
3	56.25			RFRO	-	100	-				1930	140	
4	60			CYCL/ RFRO	-	100	-		E	86.7(t)	1953	150	
	116.25	54	6.83		- des.coal	100 oil	-						
3. Sayreville Jersey Central Power & Light													
Boiler 2				RFRO							1930		
3				RFRO							1930		<5
5				top-fired				Wet	MCTA	89	1942		
6				top-fired				Wet	MCTA	88	1949		
7				PCFR, CYCL, RFRO, GFRO				Wet	E	95	1955		
8				PCFR, CYCL, RFRO, GFRO				Wet	E	90	1958		
	346.8	69	23.25		- des.s,p coal	82 oil	18 gas					980	
AREA TOTAL	3977.35		204.61										

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: New Jersey

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} $\frac{BTU}{yr}$	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	Typical Trans. Distance miles
Atlantic City SMSA													
1. England													
Atlantic City Electric Co.													
Boiler 1	136			CYCL				Wet	E	93.5	1962	340	8
2	163.2			CYCL				Wet	E	94	1964	410	
	299.2	70	17.69		92	8	-						
					des.p.coal	oil							
19. Missouri Avenue													
Atlantic City Electric Co.													
Boiler 6	26.25			PCFR	100	-	-	Dry	E	87.8	1941	70	5
7	26.25			PCFR	100	-	-	Dry	E	81.4	1946	70	
	52.5	63	3.48		100	-	-						
					des.p.coal								
AREA TOTAL	351.7	21.17											

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: New Jersey

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} $\frac{BTU}{yr}$	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	 OIL	 GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	 EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	Typical Trans. Distance Miles
Vineland SMSA													
2. Vineland Vineland Electric Department Boiler information not available	82	35	3.88		21 des.s.coal	79	-	*	*	*	1900	160	<5
AREA TOTAL	82		3.88										
Trenton SMSA													
15. Mercer Public Service Electric & Gas													
Boiler 1	326.4			PCFR				Wet	C	95.5	1960	675	<5
2	326.4			PCFR				Wet	C	90.3	1961	675	
	652.8	60	32.02		91 des.p.coal	-	9 gas						
AREA TOTAL	652.8		32.02										

NOTES

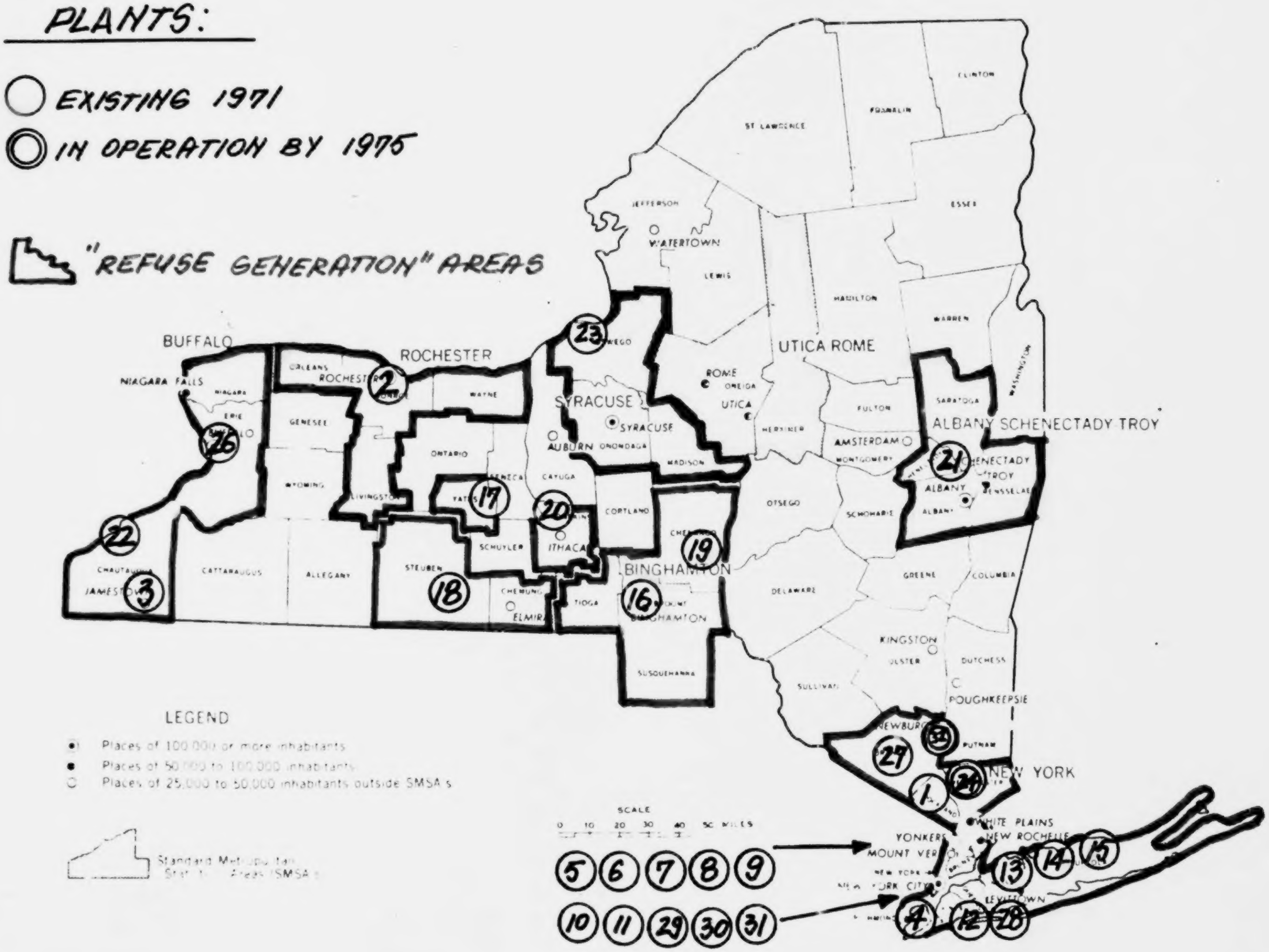
1. 18-Gibbstown (Atlantic City Electric Company) and 7-Burlington (Public Service Electric & Gas) plants included in Philadelphia SMSA, Pennsylvania.
2. 17-Deepwater (Atlantic City Electric Company) plant included in Wilmington SMSA, Delaware.
3. N.J. Plants 5 and 13 included in Allentown-Bethlehem-Eastern SMSA, Pennsylvania.

*No FPC-67 filed

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: New Jersey

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} BTU/yr	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	Typical Trans. Distance miles
Paterson-Clifton-Passaic SMSA													
6. Bergen													
Public Service Electric & Gas													
Boiler 1	325.2			PCFR				Wet	C	96.5	1959	590	5
2	325.2			PCFR				Wet	C	94.7	1960	590	
	650.4	51	27.94		60	27	13						
					des.p.coal		gas						
AREA TOTAL	650.4		27.94										


PLANTS:
○ EXISTING 1971
◎ IN OPERATION BY 1975
"REFUSE GENERATION" AREAS
BUFFALO
NIAGARA FALLS
ROCHESTER
SYRACUSE
AUBURN
UTICA ROME
ROME
UTICA
WATERTOWN
AMSTERDAM
ALBANY SCHENECTADY TROY
SCHENECTADY
TROY
ALBANY
ITHACA
ELMIRA
BINGHAMTON
JAMESTOWN
KINGSTON
POUGHKEEPSIE
NEWBURGH
NEW YORK
WHITE PLAINS
NEW ROCHELLE
YONKERS
MOUNT VERNON
NEW YORK CITY
LEVITTOWN
ST LAWRENCE
FRANKLIN
CLINTON
ESSEX
JEFFERSON
LEWIS
HAMILTON
WARREN
WASHINGTON
SARATOGA
FULTON
HERKIMER
ONEIDA
MONTGOMERY
MADISON
ONONDAGA
CAYUGA
WAYNE
ORLEANS
NIAGARA
ERIE
GENESEE
WYOMING
LIVINGSTON
ONTARIO
SENECA
YATES
SCHUYLER
CORTLAND
CHENANGO
OTSEGO
SCHOHARIE
RENSSELAER
GREENE
COLUMBIA
DELAWARE
ULSTER
DUTCHESS
SULLIVAN
PUTNAM
CHAUTAUQUA
CATTARAUGUS
ALLEGANY
STEUBEN
CHEMUNG
TIOGA
BROOME
SUSQUEHANNA
1
2
3
4
5
6
7
8
9
10
11
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26
27
28
29
30
31
33
LEGEND
Places of 100,000 or more inhabitants
Places of 50,000 to 100,000 inhabitants
Places of 25,000 to 50,000 inhabitants outside SMSA's
Standard Metropolitan Statistical Areas (SMSA's)
SCALE
0 10 20 30 40 50 MILES

REFUSE COMBUSTION FOR POWER GENERATION
New York, 1971 - All Fossil Fuel Plants

AREA	RATED CAPACITY MW	(b) ENERGY RQMT. 10^{12} $\frac{BTU}{yr}$	AREA POP. millions	(a) REFUSE GENERATION 10^6 $\frac{tons}{yr}$	10^{12} $\frac{BTU}{yr}$	POTENTIAL ENERGY SUPPLY FROM REFUSE (a/b%)	Typical Trans. Distance miles
Albany-Schenectady-Troy SMSA	400	24.9	0.734	0.48	4.34	17.3	< 5
Binghamton SMSA (incl. Chenango County)	205.8	13.2	0.355	0.23	2.10	15.9	8
Buffalo SMSA (incl. Chautauqua County)	1536.5	70.0	1.518	0.99	8.97	12.8	25
New York SMSA (incl. Orange County)	11499.1	518.9	11.961	7.85	70.72	13.6	11
Rochester SMSA	458.8	24.9	0.906	0.59	5.36	21.4	< 5
Steuben-Chemung Counties	70.0	8.7	0.205	0.12	1.10	12.6	8
Syracuse SMSA	376	19.9	0.647	0.42	3.83	19.2	30
Tompkins County	270	18.4	0.078	0.04	0.41	2.2	11
Yates County	160	10.8	0.020	0.01	0.11	1.0	10
NEW YORK TOTAL	14976.2	710.0	16.424	10.77	96.94	13.6	

Includes all plants detailed in attached data sheets.

REFUSE COMBUSTION FOR POWER GENERATION
New York, 1971 - "Coal Plants" Only

AREA	RATED CAPACITY MW	(b) ENERGY RQMT. 10^{12} $\frac{\text{BTU}}{\text{yr}}$	AREA POP. millions	(a) REFUSE GENERATION 10^{16} $\frac{\text{tons}}{\text{yr}}$	10^{12} $\frac{\text{BTU}}{\text{yr}}$	POTENTIAL ENERGY SUPPLY FROM REFUSE (a/b %)	Typical Trans. Distance miles
Albany-Schenectady-Troy SMSA	400	24.9	0.734	0.48	4.34	17.3	< 5
Binghamtom SMSA (incl. Chanago County)	205.8	13.2	0.355	0.23	2.10	15.9	8
Buffalo SMSA (incl. Chautauqua County)	1536.5	70.0	1.518	0.99	8.97	12.8	25
New York SMSA (incl. Orange County)	6657.4	312.8	11.961	7.85	70.72	22.6	11
Rochester SMSA	458.8	24.9	0.906	0.59	5.36	21.4	< 5
Steuben-Chemung Counties	70.0	8.7	0.205	0.12	1.10	12.6	8
Syracuse SMSA	376	19.9	0.647	0.42	3.83	19.2	30
Tompkins County	270	18.4	0.078	0.04	0.41	2.2	11
Yates County	160	10.8	0.020	0.01	0.11	1.0	10
NEW YORK TOTAL	10134.5	503.9	16.424	10.77	96.94	19.2	

Includes all plants capable* of burning coal (design fuel and/or current fuel). Includes all plants in attached data sheets except Nos. 6, 7, 8, 10, 11, 14, 29 and 30 (New York City area).

* Does not differentiate between types of firing -- assumes all types capable of refuse burning.

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: NEW YORK

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} BTU/yr	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	Typical Trans Distance miles
Binghampton SMSA Chenango County													
16. Goudey New York State Electric & Gas Corp.													
Boiler 8	9			PCFR	100	-	-	Wet	E	90	1927	20	< 5
9	10.5			PCFR	100	-	-	Wet	E	90	1927	20	
10	10.5			PCFR	100	-	-	Wet	E	90	1927	20	
11	21.9			PCOP	100	-	-	Wet	E	85	1943	50	
12	21.9			PCOP	100	-	-	Wet	E	85	1943	50	
13	60			PCTA	100	-	-	Wet	E	75.7	1951	140	
	145.8	58	8.27		100 des.p.coal	-	-						
19. Jennison New York State Electric & Gas Corp.													
Boiler 1	15			OSTO	100	-	-	Wet	MCAX	86	1945	50	22
2	15			OSTO	100	-	-	Wet	MCAX	86	1945	50	
3	15			OSTO	100	-	-	Wet	MCAX	86	1950	50	
4	15			OSTO	100	-	-	Wet	MCAX	86	1950	50	
	60	62	4.94		100 des.s.coal	-	-						
AREA TOTAL	205.8		13.21										

YEAR: 1971
STATE: NEW YORK

REFUSE COMBUSTION FOR POWER GENERATION

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} $\frac{BTU}{yr}$	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	Typical Trans Distance miles
Syracuse SMSA													
23. Oswego													
Niagara Mohawk Power Company													
Boiler 1	92			PCFR	100	-	-	Wet	MCTA	86	1940	205	30
2	92			PCFR	100	-	-	Wet	MCTA	86	1941	205	
3	92			PCFR	100	-	-	Wet	MCYA	88	1948	205	
4	100			PCFR	100	-	-	Wet	MCAX	89	1951	225	
	376	55	19.94		100 des.p.coal	-	-						
AREA TOTAL	376		19.94										
Buffalo SMSA													
Chautauqua County													
22. Dunkirk													
Niagara Mohawk Power Company													
Boiler 1	96			PCTA	100	-	-	Dry	MCAX	85.6	1950	185	45
2	96			PCTA	100	-	-	Dry	MCAX	80	1950	185	
3	218			PCTA	100	-	-	Dry	C	95.1	1959	420	
4	218			PCTA	100	-	-	Dry	C	95.5	1960	420	
	628	54	28.56		100 des.p.coal	-	-						

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: NEW YORK

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} BTU/yr	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	Typical Trans Distance miles
Buffalo SMSA cont'd													
Chautauqua County													
26. Huntley													
Niagara Mohawk Power Company													
Boiler 63	92			PCFR	100	-	-	Wet	C	93-95	1942	180	5
64	100			PCFR	100	-	-	Wet	C	93-95	1948	195	
65	100			PCFR	100	-	-	Wet	C	93-95	1953	195	
66	100			PCFR	100	-	-	Wet	C	93-95	1954	195	
67	218			PCTA	100	-	-	Dry	C	93-95	1957	430	
68	218			PCTA	100	-	-	Dry	C	93-95	1958	430	
	828	53	38.26		100	-	-						
					des.p.coal								
3. Carlson													
Jamestown Board of Public Utilities													
Boiler 1					100	-	-						60
2					100	-	-						
3					100	-	-						
4	23				100	-	-					35	
5	25				100	-	-					40	
	80.5	34	3.19		100	-	-						
					des.p.coal								
AREA TOTAL	1536.5		70.01										

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: NEW YORK

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} $\frac{BTU}{yr}$	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU %			BOTTOM ASH HANDLING	AIR POLLUTION CONTROL		INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	Typical Trans Distance miles
					COAL	OIL	GAS		TYPE	EFF. %			
Albany-Schenectady-Troy SMSA													
21. Albany													
Niagara Mohawk Power Company													<5
Boiler 1	100			PCTA	-	100	-	Dry	MCAX	75	1952	260	
2	100			PCTA	-	100	-	Dry	MCAX	75	1952	260	
3	100			PCTA	-	100	-	Dry	MCAX	75	1953	260	
4	100			PCTA	-	100	-	Dry	MCAX	75	1954	260	
	400	71	24.95		-	100	-						
					des.p.coal oil								
AREA TOTAL	400		24.95										

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: NEW YORK

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} $\frac{BTU}{yr}$	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	Typical Trans Distance miles
Yates County													
17. Greenidge													10
New York State Electric & Gas Corp.													
Boiler 1	10			PCFR	100	-	-	Wet	CYCL	75	1938	25	
2	10			PCFR	100	-	-	Wet	CYCL	75	1938	25	
3	20			PCFR	100	-	-	Wet	MCAX	75	1943	55	
4	20			PCFR	100	-	-	Wet	MCAX	75	1950	55	
5	20			PCFR	100	-	-	Wet	MCAX	75	1950	55	
6	80			PCTA	100	-	-	Wet	E	85	1953	230	
	160	69	10.84		100 des.p.coal	-	-						Rochester 45 Elmira 35
AREA TOTAL	160		10.84										
Rochester SMSA													
2. Rochester 3													
Rochester Gas & Electric Corp.													
Boiler 1	20.8			PCFR				Dry	E	75-80	1936	55	<5
2	20.8			PCFR				Dry	E	84-86	1937	55	
3	20.8			PCFR				Dry	E	75-80	1938	55	
4	20.8			PCFR				Dry	E	85-90	1940	55	
7	20.8			PCFR				Dry	E	82-86	1947	55	
8	20.8			PCFR				Dry	E	90-91	1942	55	
12	81.6			PCTA				Dry	E	93-96	1959	230	
	206.2	64	8.10		98 des.p.coal	-	2						

YEAR: 1971
STATE: NEW YORK

REFUSE COMBUSTION FOR POWER GENERATION

SMSA-COUNTY/PLANT	RATED CAPACITY	LOAD FACTOR	ENERGY RQMT.	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU %			BOTTOM ASH HANDLING	AIR POLLUTION CONTROL		INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY"	Typical Trans Distance miles
	MW	%	10^{12} $\frac{BTU}{yr}$		COAL	OIL	GAS		TYPE	EFF. %		tons/day	
Rochester SMSA cont'd													
2. Rochester 7													
Rochester Gas & Electric Corp.													<5
Boiler 1	46			PCTA				Dry	E	97.5	1949	130	
2	62.5			PCTA				Dry	E	97.5	1951	175	
3	62.5			PCTA				Dry	E	97.5	1953	175	
4	81.6			PCTA				Dry	E	97.5	1957	230	
	252.6	64	16.88		99 des.p.coal	-	1						
AREA TOTAL	458.8		24.98										

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: NEW YORK

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} BTU/yr	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	Typical Trans. Distance miles
Tompkins County													
20. Milliken													
New York State Electric & Gas Corp.													
Boiler 1	135			PCTA	100	-	-	Wet	E	84	1955	380	11
2	135			PCTA	100	-	-	Wet	E	86	1958	380	
	270	81	18.47		100 des.p.coal	-	-						
													Syracuse 35 Binghamton 45
AREA TOTAL	270		18.47										
Steuben County-Chemung County													
18. Hickling													
New York State Electric & Gas Corp.													
Boiler 1	15			OSTO	100	-	-	Wet	MCAX	86	1948	75	8
2	15			OSTO	100	-	-	Wet	MCAX	86	1948	75	
3	20			OSTO	100	-	-	Wet	MCAX	86	1952	105	
4	20			OSTO	100	-	-	Wet	MCAX	86	1952	105	
	70	96	8.70		100 des.s.coal	-	-						
													Binghamton 55 Rochester 80
AREA TOTAL	70		8.70										

YEAR:1971
STATE: NEW YORK

REFUSE COMBUSTION FOR POWER GENERATION

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} $\frac{BTU}{yr}$	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	Typical Trans Distance miles
New York SMSA Orange County													
12. Far Rockaway (Long Island Lighting Co.) Boiler 4	113.6	58	6.10	RTAN- GTAN- PCTA	-	85	15	DRY	C	N.R.	1953	260	10
				des.p.	coal	oil	gas						
13. Glenwood (Long Island Lighting) Boiler 1	30			RFRO GFRO				DRY	E	N.R.	1928	55	15
2	30			RFRO GFRO				DRY	E	N.R.	1928	55	
3	30			RFRO GFRO				DRY	C	N.R.	1930	55	
4	30			RFRO GFRO				DRY	C	N.R.	1930	55	
5	30			Top Fired				DRY	None	N.R.	1942	55	
6	30			PCTA GTAN RTAN				DRY	None	N.R.	1946	55	
40	100			PCTA RTAN GTAN				DRY	C	N.R.	1952	190	
50	100			PCTA RTAN GTAN				DRY	C	N.R.	1954	190	
	380.3	40	17.24		–	75	25						
				des.p.	coal	oil	gas						

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: NEW YORK

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} $\frac{BTU}{yr}$	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	Typical Trans Distance miles
New York SMSA Orange County cont'd													
15. Port Jefferson (Long Island Lighting Co.)													44
Boiler 10	46			PCTA RTAN				DRY	C/MCTA	NR	1948	115	
20	46			PCTA RTAN				DRY	C/MCTA	NR	1950	115	
30	187.5			PCTA RTAN				DRY	C/MCTA	NR	1958	480	
40	187.5			PCTA RTAN				DRY	C/MCTA	NR	1960	480	
	467	67	28.31		-	100	-						
					des.p.	coal oil							
30. 59th Street (Con Edison)													
Boiler 111	30.5			RFRO				None	None	-	1962	65	<5
112	30.5			RFRO				None	None	-	1962	65	
113	30.5			RFRO				None	None	-	1952	65	
110	58			RFRO				None	None	-	1962	125	
114	} 35			RTAN				None	None	-	1967 }	75	
115				RTAN				None	None	-	1967		
	184.5	36	5.86		-	100	-						
					des.	oil							

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: NEW YORK

SMSA-COUNTY/PLANT	RATED CAPACITY	LOAD FACTOR	ENERGY RQMT.	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU %			BOTTOM ASH HANDLING	AIR POLLUTION CONTROL		INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY"	Typical Trans. Distance Miles
	MW	%	10^{12} BTU/yr		COAL	OIL	GAS		TYPE	EFF. %		tons/day	
New York SMSA Orange County cont'd													
27. Danskammer													50
(Central Hudson Gas & Elec.)													
Boiler 1	72.7			PCTA				Dry	E	98	1951	170	
2	74.2			PCTA/GTAN				Dry	E	98	1954	175	
3	148.5			PCTA				Dry	E	98	1959	350	
4	242.0			PCTA				Dry	E	98	1967	575	
	537.4	63	30.19		12	84	4						
					des p. coal	oil	gas						
1. Lovett													
(Orange & Rockland Utilities)													40
Boiler 1	23			PCFR, RFRO GFRO				Dry	MCTA	85	1949	55	
2	23			PCFR, RFRO GRRP				Dry	MCTA	85	1951	55	
3	69			PCTA, RTAN GTAN				Dry	MCTA	85	1955	170	
4	179.5			PCFR, RFRO GFRO				Dry	E	92	1966	445	
5	200.6			PCFR, RFRO				Dry	E	92	1969	500	
	495.1	63	28.96	GPRO	-	64	36						
					des. p. coal/oil/gas								

REFUSE COMBUSTION FOR POWER GENERATION

YEAR:1971
STATE:NEW YORK

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} BTU/yr	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	Typical Trans Dist. miles
New York SMSA Orange County cont'd.													
5. Astoria (Con Edison)													<5
Boiler 10	200			RFRO,PCFR GFRO				Dry	C	97(d)	1953	360	
20	200			RFRO,PCFR, GFRO				Dry	C	97(d)	1954	360	
30	376			RFRO,PCFR GFRO				Dry	C	99(d)	1958	680	
40	387			PCTA				Dry	C	99(d)	1961	700	
50	387			PCTA				Dry	C	99(d)	1961	700	
	1550	45	66.56		16	63	21						
					des p. coal	oil	gas						
6. East River (Con Edison)													<5
Boiler 1	Total 321			RFRO				None	None	-	1926	645	
2				RFRO				None	None	-	1926		
3				RFRO				None	None	-	1927		
4				RFRO				None	None	-	1927		
5				RFRO				None	None	-	1927		
6				RFRO				None	None	-	1927		
7				ROPP				None	None	-	1929		
8				ROPP				None	None	-	1929		
9				ROFP				None	None	-	1929		
50	156			top-fired				None	None	-	1950	310	
60	156			top-fired				None	None	-	1951	310	
70	200			RFRO				None	C	97(d)	1955	400	
	834	33	39.02		-	38	62						
					des	oil	gas						

YEAR:1971
STATE:NEW YORK

REFUSE COMBUSTION FOR POWER GENERATION

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} $\frac{BTU}{yr}$	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	Typical Trans Distance miles
New York SMSA - Orange Co. cont'd.													
7. Hell Gate (Con Edison)													<5
Boiler 11				GFRO/RFRO				None	None	-	1946		
12				GFRO/RFRO				None	None	-	1946		
31				RFRO				None	None	-	1922		
32				RFRO				None	None	-	1922		
33				RFRO				None	None	-	1922		
41				RFRO				None	None	-	1922		
42				RFRO				None	None	-	1922		
43	**			RFRO				None	None	-	1922		
51				RFRO				None	None	-	1923		
52				RFRO				None	None	-	1923		
53				RFRO				None	None	-	1924		
71				RFRO				None	None	-	1925		
72				RFRO				None	None	-	1925		
73				RFRO				None	None	-	1925		
81				GTAN/RTAN				None	None	-	1928		
82				GTAN/RTAN				None	None	-	1928		
83				GTAN/RTAN				None	None	-	1929		
91				GOPP/ROPP				None	None	-	1930		
92				GOPP/ROPP				None	None	-	1930		
	511*	40	28.60		-	91	9						
					des oil gas							1320	

* Note: 2-50 MW boilers retired in 1971 and not included in total

**No breakdown in FPC-67

YEAR: 1971
STATE: NEW YORK

REFUSE COMBUSTION FOR POWER GENERATION

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} $\frac{BTU}{yr}$	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	Typical Trans Distance miles
New York SMSA Orange Co. cont'd													
10. Sherman Creek * (Con Edison)													<5
Boiler 90	108.25			RTAN				None	None	-	1943	85	
100	108.25			RTAN				None	None	-	1947	85	
	216.5	10	4.02		-	97	3						
					des. oil								
9. Ravenswood (Con Edison)													<5
Boiler 10	400			GTAN/RTAN				-	-	-	1963	730	
20	400			GTAN/RTAN				-	-	-	1963	730	
30	1028			RTAN/PCTA				Dry	C	99(d)	1965	1880	
	1828	50	78.27		-	92	8						
					des p. coal	oil	gas						
4. Arthur Kill (Con Edison)													<5
Boiler 2	376			RFRO/PCFR				Dry	C	99	1959	605	
3	535			PCTA				Dry	E	99.5	1969	1840	
	911	41	34.72		56	44	-						
					des p. coal	oil							

* Retired 1972

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: NEW YORK

SMSA-COUNTY/PLANT	RATED CAPACITY	LOAD FACTOR	ENERGY RQMT.	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU %			BOTTOM ASH HANDLING	AIR POLLUTION CONTROL		INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY"	TYPICAL TRANS. DISTANCE
	MW	%	10^{12} BTU/yr		COAL	OIL	GAS		TYPE	EFF. %		tons/day	miles
New York SMSA Orange County cont'd													
8. Hudson Avenue (Con Edison)													
Boiler 61				RFRO	-	100	-	None	None	-	1930		<5
62				RFRO	-	100	-	None	None	-	1930		
63				RFRO	-	100	-	None	None	-	1930		
64				RFRO	-	100	-	None	None	-	1930		
71				RFRO	-	100	-	None	None	-	1932		
72				RFRO	-	100	-	None	None	-	1932		
73				RFRO	-	100	-	None	None	-	1932		
74				RFRO	-	100	-	None	None	-	1932		
81				RFRO	-	100	-	None	None	-	1932		
82				RFRO	-	100	-	None	None	-	1932		
83				RFRO	-	100	-	None	None	-	1932		
84				RFRO	-	100	-	None	None	-	1932		
100				RFRO	-	100	-	None	None	-	1950		
32				RFRO	-	100	-	None	None	-	1924		
33				RFRO	-	100	-	None	None	-	1924		
34				RFRO	-	100	-	None	None	-	1924		
41				RFRO	-	100	-	None	None	-	1926		
42				RFRO	-	100	-	None	None	-	1926		
43				RFRO	-	100	-	None	None	-	1927		
44				RFRO	-	100	-	None	None	-	1927		
51				RFRO	-	100	-	None	None	-	1928		
52				RFRO	-	100	-	None	None	-	1928		
53				RFRO	-	100	-	None	None	-	1928		
54				RFRO	-	100	-	None	None	-	1928		
	845	26	30.71		-	100	-					1440	
					des	oil							

YEAR: 1971
STATE: NEW YORK

REFUSE COMBUSTION FOR POWER GENERATION

SMSA-COUNTY/PLANT		RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} $\frac{BTU}{yr}$	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANS. DISTANCE MILES
NEW YORK SMSA, Orange County (Cont'd.)														
31. KENT AVENUE** Con Edison														
Boiler	1	36			*				None	None	-	1938	25	<5
	2	36			*				None	None	-	1938	25	
	3	36			GTAN				None	None	--	1959	25	
		108	11	19.87	RTAN	-	-	100						
						des. oil/gas								

* Fired Vertically Downward from Furnace Roof

** Retired, 1972.

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: NEW YORK

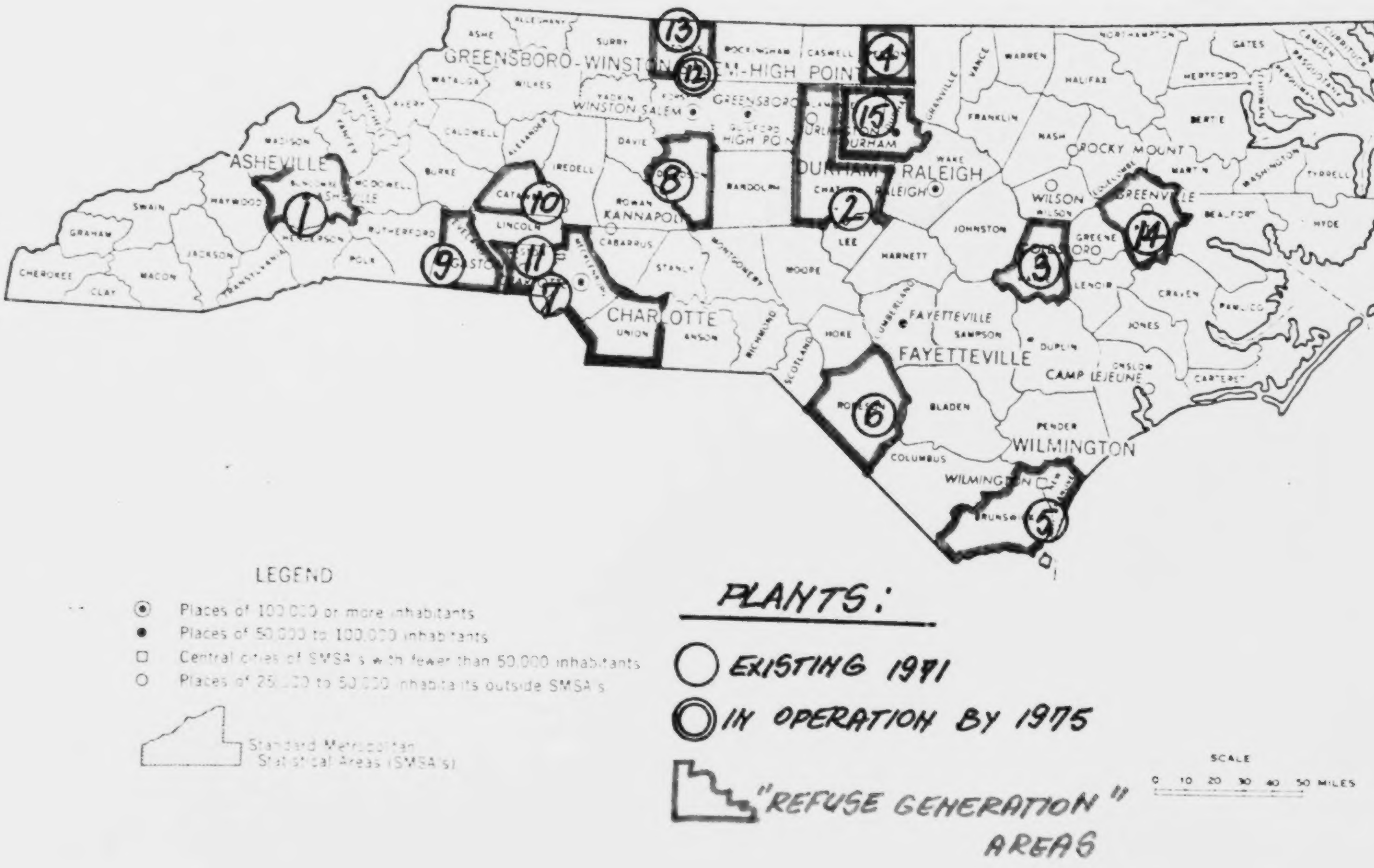
SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} $\frac{BTU}{yr}$	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANS. DISTANCE miles
New York SMSA, Orange County cont'd													
29. 74th Street (Con Edison)													
Boiler 120	89.7			RTAN	-	100	-	None	None	-	1956	105	<5
121	89.7			RTAN	-	100	-	None	None	-	1956	105	
122	89.7			RTAN	-	100	-	None	None	-	1960	105	
	269.1	22	5.68			100							
					des	oil							
11. Waterside (Con Edison)													
Boiler 41				GTAN/RTAN				None	None				<5
42				GTAN/RTAN				None	None				
51				GTAN/RTAN				None	None				
52				GTAN/RTAN				None	None				
61				RTAN				None	None				
62				RTAN				None	None				
71				*				None	None				
72				*				None	None				
80				RTAN				None	None	-	1949		
90				RTAN				None	None	-	1949		
	712.3	33	30.19		-	61	39					1275	
					des	oil	gas						
28. Barrett (Long Island Lighting)													
Boiler 10	187.5			RTAN/GTAN/PCTA				Dry	C	97.9(t)	1956	475	10
20	187.5			RTAN/GTAN				Dry	none	-	1963	475	
	375	67	22.45		-	85	15						
					des p. coal	oil	gas						

* fired vertically downward from furnace roof

YEAR: 1971
STATE:NEW YORK

REFUSE COMBUSTION FOR POWER GENERATION

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} $\frac{\text{BTU}}{\text{yr}}$	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANS. DISTANCE miles
New York SMSA Orange County cont'd													
14. Northport (Long Island Lighting)													
Boiler 10	387.1			RTAN	-	100	-	Dry	MCTA	85(d)	1967	900	27
20	387.1			RTAN	-	100	-	Dry	MCTA	85(d)	1968	900	
3	387.1			RTAN	-	100	-	Dry	E	98.4(t)	1972	900	
	1161.3	65	42.20		-	100	-						
					des oil								
AREA TOTAL	11499.1		518.95										


GREENSBORO-WINSTON-SALEM-HIGH POINT
ASHEVILLE
CHARLOTTE
KANNAPOLIS
DURHAM
RALEIGH
ROCKY MOUNT
WILSON
GREENVILLE
FAYETTEVILLE
CAMP LEJEUNE
WILMINGTON
WINSTON-SALEM
GREENSBORO
HIGH POINT
ALLEGHANY
ASHE
SURRY
ROCKINGHAM
CASWELL
VANCE
WARREN
NORTHAMPTON
GATES
CAMDEN
CURRITUCK
PASQUOTANK
PERQUIMANS
HERTFORD
HALIFAX
CHOWAN
BERTIE
WATAUGA
WILKES
YADKIN
FORSYTH
GUILFORD
GRANVILLE
FRANKLIN
NASH
EDGECOMBE
MARTIN
WASHINGTON
TYRRELL
DARE
MITCHELL
YANCEY
AVERY
MADISON
CALDWELL
ALEXANDER
IREDELL
DAVIE
ROWAN
DAVIDSON
RANDOLPH
ALAMANCE
CHATHAM
WAKE
JOHNSTON
GREENE
PITT
BEAUFORT
HYDE
BUNCOMBE
MCDOWELL
BURKE
CATAWBA
LINCOLN
GASTON
MECKLENBURG
CABARRUS
STANLY
MONTGOMERY
MOORE
LEE
HARNETT
WAYNE
LENOIR
CRAVEN
PAMLICO
SWAIN
HAYWOOD
HENDERSON
RUTHERFORD
POLK
CLEVELAND
UNION
ANSON
RICHMOND
SCOTLAND
HOKE
CUMBERLAND
SAMPSON
DUPLIN
JONES
ONSLOW
CARTERET
GRAHAM
CHEROKEE
CLAY
MACON
JACKSON
TRANSYLVANIA
ROBESON
BLADEN
PENDER
COLUMBUS
BRUNSWICK
NEW HANOVER
1
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15
LEGEND
◉ Places of 100,000 or more inhabitants
● Places of 50,000 to 100,000 inhabitants
□ Central cities of SMSA's with fewer than 50,000 inhabitants
○ Places of 25,000 to 50,000 inhabitants outside SMSA's
Standard Metropolitan Statistical Areas (SMSA's)
PLANTS:
○ EXISTING 1971
◎ IN OPERATION BY 1975
"REFUSE GENERATION" AREAS
SCALE
0 10 20 30 40 50 MILES

REFUSE COMBUSTION FOR POWER GENERATION

North Carolina, 1971 - Coal Plants

AREA	RATED CAPACITY MW	(b) ENERGY RQMT. 10^{12} $\frac{\text{BTU}}{\text{yr}}$	AREA POP. millions	(a) REFUSE GENERATION 10^6 $\frac{\text{tons}}{\text{yr}}$	10^{12} $\frac{\text{BTU}}{\text{yr}}$	POTENTIAL ENERGY SUPPLY FROM REFUSE (a/b %)	TYPICAL TRANS. DISTANCE miles
Asheville SMSA	413.6	20.2	0.148	0.09	0.87	4.3	< 5
Charlotte-Gastonia SMSA	1792.0	120.9	0.568	0.37	3.35	2.8	5
Durham SMSA	12.5	0.5	0.193	0.12	1.14	219.0	22
Wilmington SMSA	225.0	13.0	0.109	0.07	0.64	5.0	12
Catawba County	2000.0	118.9	0.092	0.05	0.49	0.4	8
Chatham County	421.0	20.1	0.030	0.01	0.16	0.8	10
Cleveland County	210.0	15.8	0.074	0.04	0.39	2.5	10
Davidson County	444.0	32.4	0.097	0.05	0.51	1.6	10
Person County	1067.9	62.3	0.026	0.01	0.13	0.2	< 5
Pitt County	20.0*	-	0.074	0.04	0.39	-	
Robeson County	165.5	9.6	0.085	0.05	0.45	4.7	< 5
Stokes County	290.0	20.5	0.024	0.01	0.12	0.6	5
Wayne County	402.5	23.0	0.086	0.05	0.45	2.0	< 5
NORTH CAROLINA STATE TOTALS	7464.0	457.8	1.606	1.01	9.15	2.0	

* Plant was retired in 1971.

REFUSE COMBUSTION FOR POWER GENERATION

North Carolina, 1971 - All Fossil Fuel Plants - Identical to table above.

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: NORTH CAROLINA

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} $\frac{BTU}{yr}$	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANS. DISTANCE miles
Asheville SMSA													
1. Asheville (Carolina Power & Light)													
Boiler 1	206.6			PCFR	100			Dry	C	95.6	1964	430	5
2	207			PCFR	100			Dry	C	99.7	1971	430	
	413.6	58	20.27		100 des p. coal								
AREA TOTAL	413.6		20.27										
Chatham County													
2. Cape Fear (Carolina Power & Light)													
Boiler 1	30			SPRE	100			Dry	None	-	1923	60	10
2				SPRE	100			Dry	None	-	1923		
3				SPRE	100			Dry	None	-	1923		
4				SPRE	100			Dry	None	-	1923		
5				SPRE	100			Dry	None	-	1923		
6				SPRE	100			Dry	None	-	1926		
7	62.5			PCFR	100			Dry	MCTA	70	1942	125	
8				PCFR	100			Dry	MCTA	70	1943		
9	140.6			PCTA	100			Dry	MCTA	80	1956	285	
10	187.9			PCTA	100			Dry	MCTA	80	1958	385	
	421	55	20.13		100 des p. coal								Durham 23 Raleigh 30
AREA TOTAL	421.0		20.13										

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: NORTH CAROLINA

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} BTU/yr	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANS. DISTANCE miles
Wayne County													
3. Lee (Carolina Power & Light)													
Boiler 1	75			PCTA				Dry	MCTA	80	1952	180	<5
2	75			PCFR				Dry	MCTA	80	1951	180	
3	252.5			PCOP				Dry	MCTA	80	1962	610	Fayetteville 50
	402.5	65	23.01		-	5	95						Raleigh 45
					des. p. coal								
AREA TOTAL	402.5		23.01										
Person County													
4. Roxboro (Carolina Power & Light)													
Boiler 1	410.9			PCOP	100	-	-	Dry	MCTA	80	1966	1025	<5
2	657			PCTA	100	-	-	Dry	MCTA	80	1968	1640	Durham 23
-	1067.9	71	62.39		100	-	-						Danville, Va 30
					des.p.coal								
AREA TOTAL	1067.9		62.39										
Wilmington SMSA													
5. Sutton (Carolina Power & Light)													
Boiler 1	112.5			PCTA				Wet	MCTA	80	1954	275	12
2	112.5			PCFR				Wet	MCTA	80	1956	275	
	225.0	62	13.02		67	1	32						
					des p.coal	oil	gas						
AREA TOTAL	225.0		13.02										

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: NORTH CAROLINA

SMSA-COUNTY/PLANT	RATED CAPACITY	LOAD FACTOR	ENERGY RQMT.	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU %			BOTTOM ASH HANDLING	AIR POLLUTION CONTROL		INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY"	TYPICAL TRANS. DISTANCE
	MW	%	10^{12} $\frac{BTU}{yr}$		COAL	OIL	GAS		TYPE	EFF. %		tons/day	miles
Robeson County													
6. Weatherspoon (Carolina Power & Light)													
Boiler 1	46			PCFR				Dry	MCTA	80	1949	110	<5
2	46			PCFR				Dry	MCTA	80	1950	110	
3	73.5			PCTA				Dry	MCTA	80	1952	180	
	165.5	60	9.68		-	46	54						Fayetteville 30
					des.p.coal/ gas								
AREA TOTAL	165.5		9.68										
Charlotte-Gastonia SMSA													
7. Allen (Duke Power Co.)													
Boiler 1	165			PCTA	100			Dry	C	97.1	1957	455	5
2	165			PCTA	100			Dry	C	97.1	1957	455	
3	275			PCTA	100			Dry	E	87	1959	765	
4	275			PCTA	100			Dry	E	99.5	1960	765	
5	275			PCTA	100			Dry	E	87	1961	765	
	1155	81	75.25		100	-	-						
					des p. coal								

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: NORTH CAROLINA

SMSA-COUNTY/PLANT	RATED CAPACITY	LOAD FACTOR	ENERGY RQMT.	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU %			BOTTOM ASH HANDLING	AIR POLLUTION CONTROL		INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY"	TYPICAL TRANS. DISTANCE
	MW	%	$10^{12}\ \frac{BTU}{yr}$		COAL	OIL	GAS		TYPE	EFF. %		tons/day	miles
Charlotte-Gastonia SMSA cont'd													
11. Riverbend (Duke Power Co.)													
Boiler 1	27.5			PCFR	100	-	–	Dry	None	-		70	5
2	27.5			PCFR	100	–	-	Dry	None	-		70	
3	27.5			PCFR	100	–	-	Dry	None	-		70	
4	27.5			PCFR	100	–	-	Dry	None	-		70	
5	27.5			PCFR	100	–	-	Dry	None	-		70	
6	27.5			PCFR	100	–	-	Dry	None	-		70	
7	100			PCFA	100	–	-	Dry	E	87		255	
8	100			PCFA	100	–	–	Dry	E	99		255	
9	133			PCTA	100	-	-	Dry	E	99		340	
10	133			PCTA	100	–	-	Dry	E	87		340	
	637	65	45.73		100	–	–						
					des.p.coal								
AREA TOTAL	1792.0		120.98										
Davidson County													
8. Buck (Duke Power Co.)													
Boiler 1	17.5			PCFR	100	-	-	Dry	None	-	1926	40	10
2	17.5			PCFR	100	-	–	Dry	None	-	1926	40	
3	17.5			PCFR	100	-	–	Dry	None	-	1926	40	
4	17.5			PCFR	100	-	–	Dry	None	-	1926	40	Winston-Salem 27
5	40			PCTA	100	-	–	Dry	E	99	1941	100	Charlotte 40
6	40			PCTA	100	-	–	Dry	E	99	1941	100	
7	40			PCTA	100	–	-	Dry	E	99	1942	100	

(Continued on next page)

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: NORTH CAROLINA

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. $10^{12}\frac{BTU}{yr}$	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANS. DISTANCE miles
Davidson cont'd													
8	125			PCTA	100	-	-	Dry	E	88	1953	310	
9	125			PCTA	100	-	-	Dry	E	88	1953	310	
	444	60	32.46		100	-	-						
					des.p.coal								
AREA TOTAL	444.0		32.46										
Cleveland County													
9. Cliffside (Duke Power Co.)													
Boiler 1	40			PCTA	100	-	-	Dry	E	99	1940	125	10
2	40			PCTA	100	-	-	Dry	E	99	1940	125	
3	65			PCTA	100	-	-	Dry	E	88	1948	205	Gastonia 30
4	65			PCTA	100	-	-	Dry	E	88	1948	205	Greenville, SC 45
	210	75	15.84		100	-	-						
					des.p.coal								
AREA TOTAL	210.0		15.84										
Catawba County													
10. Marshall (Duke Power Co.)													
Boiler 1	350			PCTA				Dry	C	95	1965	885	8
2	350			PCTA				Dry	C	95	1966	885	
3	650			PCTA				Dry	E	97.5	1969	1645	Charlotte 27
4	650			PCTA				Dry	E	97.5	1970	1645	
	2000	78	118.97		99	1	-						
					des.p.coal								
AREA TOTAL	2000.0		118.97										

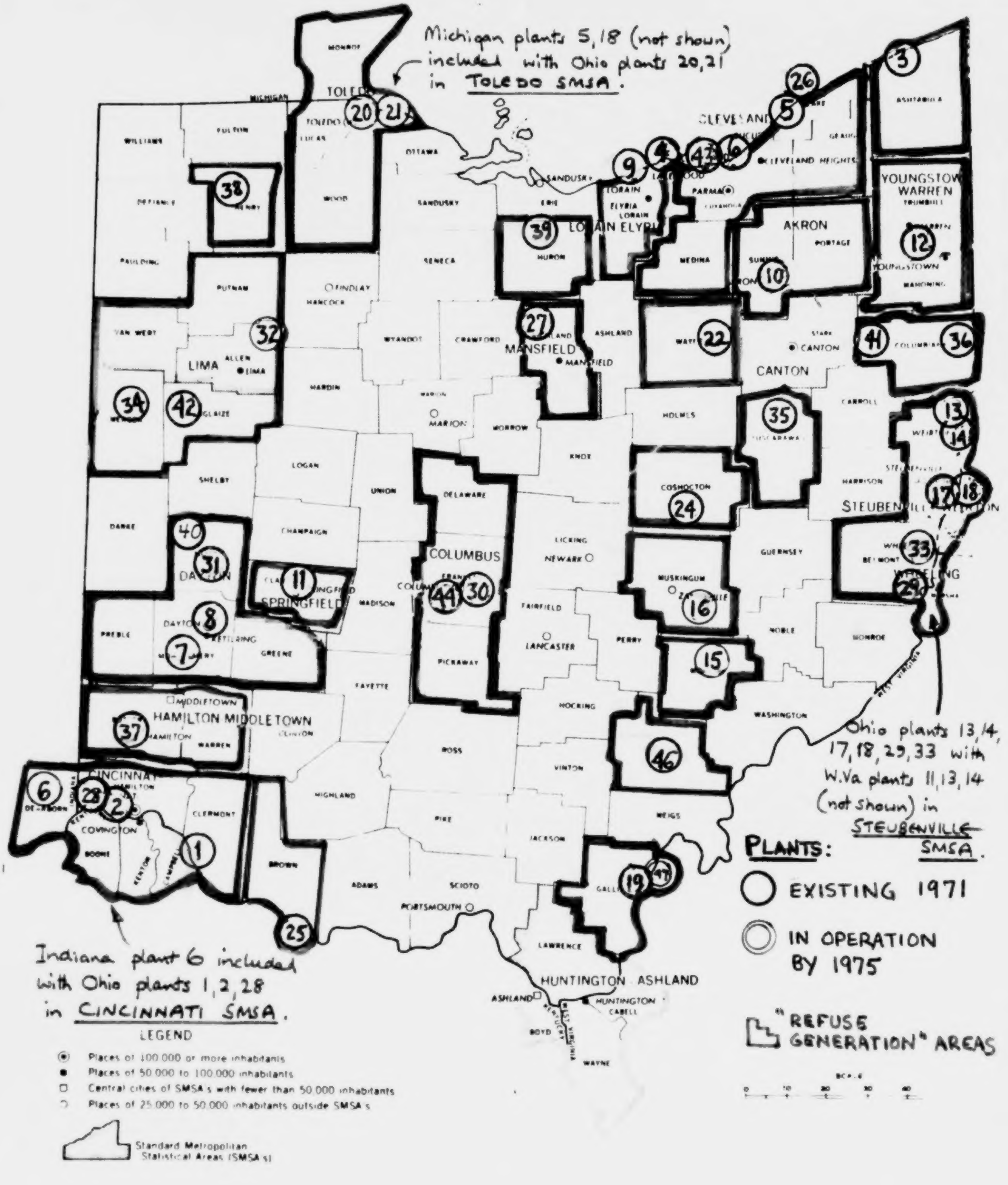
REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: NORTH CAROLINA

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} $\frac{BTU}{yr}$	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANS. DISTANCE miles
Stokes County													
13. Dan River (Duke Power Co.)													
Boiler 1	70			PCTA	100	-	-	Dry	E	99.1	1949	210	5
2	70			PCTA	100	-	-	Dry	E	99.1	1950	210	Winston Salem 30
3	150			PCTA	100	-	-	Dry	MCTA/E	99.2	1955	450	
	290	79	20.56		100 des.p.coal	-	-						
AREA TOTAL	290.0		20.56										
Durham SMSA													
15. Chapel Hill (Chapel Hill, University of N.C.)	12.5	36.5	0.52		10 des.p.coal	27	63	*	*	*	-	20	5
AREA TOTAL	12.5		0.52										

* No FPC-67 filed.

OHIO


MICHIGAN
MONROE
TOLEDO
20
21
WILLIAMS
FULTON
LUCAS
OTTAWA
38
HENRY
DEFIANCE
WOOD
SANDUSKY
ERIE
SANDUSKY
CLEVELAND
3
ASHTABULA
26
5
GEAUGA
9
4
43
16
LORAIN
ELYRIA
LAKEWOOD
PARMA
CLEVELAND HEIGHTS
CUYAHOGA
YOUNGSTOWN WARREN
TRUMBULL
WARREN
12
YOUNGSTOWN
MAHONING
PAULDING
PUTNAM
SENECA
39
HURON
LORAIN ELYRIA
MEDINA
AKRON
PORTAGE
SUMMIT
10
FINDLAY
HANCOCK
VAN WERT
32
LIMA
ALLEN
LIMA
WYANDOT
CRAWFORD
27
MANSFIELD
ASHLAND
22
WAYNE
STARK
CANTON
CANTON
41
COLUMBIANA
36
HARDIN
MARION
MARION
34
MERCER
42
AUGLAIZE
MORROW
HOLMES
35
TUSCARAWAS
CARROLL
13
14
WEIRTON
KNOX
LOGAN
SHELBY
UNION
DELAWARE
COSHOCTON
24
HARRISON
STEUBENVILLE
17
18
STEUBENVILLE WEIRTON
DARKE
40
31
DAYTON
CHAMPAIGN
11
CLARK
SPRINGFIELD
LICKING
NEWARK
COLUMBUS
FRANKLIN
44
30
MADISON
MUSKINGUM
ZANESVILLE
16
GUERNSEY
BELMONT
33
WHEELING
29
PREBLE
8
DAYTON
KETTERING
7
MONTGOMERY
GREENE
FAIRFIELD
LANCASTER
PERRY
15
NOBLE
MONROE
MARSHALL
FAYETTE
PICKAWAY
MIDDLETOWN
HAMILTON MIDDLETOWN
37
HAMILTON
BUTLER
WARREN
CLINTON
HOCKING
46
WASHINGTON
WEST VIRGINIA
ROSS
VINTON
CINCINNATI
6
DEARBORN
28
2
HAMILTON
CLERMONT
COVINGTON
BOONE
KENTON
CAMPBELL
1
HIGHLAND
PIKE
JACKSON
MEIGS
BROWN
ADAMS
SCIOTO
PORTSMOUTH
19
47
GALLIA
25
LAWRENCE
HUNTINGTON ASHLAND
ASHLAND
HUNTINGTON
CABELL
BOYD
KENTUCKY
WEST VIRGINIA
WAYNE
SCALE
0
10
20
30
40

Michigan plants 5, 18 (not shown) included with Ohio plants 20, 21 in TOLEDO SMSA.

Ohio plants 13, 14, 17, 18, 29, 33 with W.Va plants 11, 13, 14 (not shown) in STEUBENVILLE SMSA.

Indiana plant 6 included with Ohio plants 1, 2, 28 in CINCINNATI SMSA.

PLANTS:

○ EXISTING 1971

◎ IN OPERATION BY 1975

"REFUSE GENERATION" AREAS

LEGEND

⦿ Places of 100,000 or more inhabitants

● Places of 50,000 to 100,000 inhabitants

□ Central cities of SMSA's with fewer than 50,000 inhabitants

○ Places of 25,000 to 50,000 inhabitants outside SMSA's

Standard Metropolitan Statistical Areas (SMSA's)

REFUSE COMBUSTION FOR POWER GENERATION

Ohio, 1971 - All Fossil Fuel Plants

AREA	RATED CAPACITY MW	(b) ENERGY RQMT. 10^{12} $\frac{BTU}{yr}$	AREA POP. millions	(a) REFUSE GENERATION 10^6 $\frac{tons}{yr}$	(a) REFUSE GENERATION 10^{12} $\frac{BTU}{yr}$	POTENTIAL ENERGY SUPPLY FROM REFUSE (a/b %)	TYPICAL TRANS. DISTANCE miles
Akron SMSA	87.5	5.4	0.691	0.45	4.09	75.2	5
Cincinnati SMSA	3060.1	114.4	1.409	0.92	8.33	7.3	20
Cleveland SMSA	1289.0	77.7	2.104	1.38	12.44	16.0	14
Columbus SMSA	287.3	8.4	0.939	0.61	5.55	65.6	3
Dayton SMSA	935.5	43.2	0.873	0.57	5.16	11.9	8
Hamilton-Middletown SMSA	83.5	4.3	0.230	0.15	1.36	31.3	10
Lima SMSA (Incl. Anglaize Co. & Mercer Co.)	85.1	2.2	0.251	0.16	1.48	64.6	18
Lorain-Elyria SMSA	787.9	73.0	0.262	0.17	1.55	2.1	9
Mansfield SMSA	26.0	2.1	0.133	0.08	0.79	37.1	12
Springfield SMSA	100.0	2.8	0.161	0.10	0.95	33.9	<5
Steubenville-Weirton-Wheeling SMSA	7131.6	332.9	0.350	0.23	2.07	0.6	11
Toledo SMSA	2088.7	110.4	0.704	0.46	4.16	3.8	12
Youngstown-Warren SMSA	250.0	14.0	0.541	0.35	3.20	22.8	10
Ashtabula County	456.0	20.9	0.100	0.05	0.53	2.5	<5
Athens County	232.0	14.5	0.055	0.03	0.29	2.0	5
Brown County	1220.4	49.9	0.027	0.01	0.14	0.3	15
Columbiana County	31.8	0.8	0.109	0.06	0.58	69.2	12
Coshoctun County	433.5	26.5	0.034	0.02	0.18	0.7	10
Gallia County	1086.5	67.7	0.025	0.01	0.13	0.2	8
Henry County	23.5	0.6	0.028	0.01	0.15	22.1	5
Huron County	31.0	0.7	0.050	0.03	0.26	34.7	12
Morgan County	1529.6	85.1	0.012	0.00	0.06	0.1	7
Muskingum County	500.0	19.5	0.078	0.04	0.41	2.1	10
Tuskarawas County	35.9	0.8	0.077	0.04	0.41	46.7	<5
Wayne County	104.5	1.7	0.089	0.05	0.47	27.8	9
OHIO STATE TOTALS	21896.9	1080.7	9.332	6.04	54.36	5.0	

REFUSE COMBUSTION FOR POWER GENERATION

Ohio, 1971 - "Coal Plants" Only*

AREA	RATED CAPACITY MW	(b) ENERGY RQMT. 10^{12} $\frac{BTU}{yr}$	AREA POP. millions	(a) REFUSE GENERATION 10^6 $\frac{tons}{yr}$	(a) REFUSE GENERATION 10^{12} $\frac{BTU}{yr}$	POTENTIAL ENERGY SUPPLY FROM REFUSE (a/b %)	TYPICAL TRANS. DISTANCE miles
Akron SMSA	87.5	5.4	0.691	0.45	4.09	75.2	5
Cincinnati SMSA	2840.8	6.8	1.409	0.92	8.33	1.2	18
Cleveland SMSA	1289.0	77.7	2.104	1.38	12.44	16.0	14
Columbus SMSA	287.3	8.4	0.939	0.61	5.55	65.6	3
Dayton SMSA	935.5	43.2	0.873	0.57	5.16	11.9	8
Hamilton-Middletown SMSA	83.5	4.3	0.230	0.15	1.36	31.3	10
Lima SMSA (Incl. Anglaize Co. & Mercer Co.)	85.1	2.2	0.251	0.16	1.48	64.6	18
Lorain-Elyria SMSA	787.9	73.0	0.262	0.17	1.55	2.1	9
Mansfield SMSA	26.0	2.1	0.133	0.08	0.79	37.1	12
Springfield SMSA	100.0	2.8	0.161	0.10	0.95	33.9	<5
Steubenville-Weirton-Wheeling SMSA	7131.6	332.9	0.350	0.23	2.07	0.6	11
Toledo SMSA	2088.7	110.4	0.704	0.46	4.16	3.8	12
Youngstown-Warren SMSA	250.0	14.0	0.541	0.35	3.20	22.8	10
Ashtabula County	456.0	20.9	0.100	0.05	0.53	2.5	<5
Athens County	232.0	14.5	0.055	0.03	0.29	2.0	5
Brown County	1220.4	49.9	0.027	0.01	0.14	0.3	15
Columbiana County	31.8	0.8	0.109	0.06	0.58	69.2	12
Coshoctun County	433.5	26.5	0.034	0.02	0.18	0.7	10
Gallia County	1086.5	67.7	0.025	0.01	0.13	0.2	8
Henry County	23.5	0.6	0.028	0.01	0.15	22.1	5
Huron County	31.0	0.7	0.050	0.03	0.26	34.7	12
Morgan County	1529.6	85.1	0.012	0.00	0.06	0.1	7
Muskingum County	500.0	19.5	0.078	0.04	0.41	2.1	10
Tuskarawas County	35.9	0.8	0.077	0.04	0.41	46.7	<5
Wayne County	104.5	1.7	0.089	0.05	0.47	27.8	9
OHIO STATE TOTALS	21677.6	973.2	9.332	6.04	54.36	5.6	

*Includes all plants in the Data Tables except 2.

YEAR: 1971
STATE: OHIO

REFUSE COMBUSTION FOR POWER GENERATION

SMSA-COUNTY/PLANT		RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} $\frac{BTU}{yr}$	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANS. DISTANCE miles
Akron SMSA														
10. Gorge (Ohio Edison Co.)														
Boiler	25	43.75		–	PCFR	100	-	-	Dry	MCAX/E	83/99.5	1943	115	5
	26	43.74			PCFR	100	-	-	Dry	MCAX/E	85/99.5	1948	115	
		87.50	56	5.43		100 des. p-coal	-	-						Warren-Youngstown 40 Cleveland 25
AREA TOTAL		87.5		5.43										
Cincinnati SMSA														
1. Beckjord (Cincinnati Gas & Electric)														
Boiler	1	115			PCTA				Dry	E	92	1952	275	20
	2	112.5			PCTA				Dry	E	92	1953	270	
	3	125			PCFR				Dry	E	93	1954	300	
	4	163.2			PCTA				Dry	C	94	1958	390	
	5	244.8			PCTA				Dry	E	95	1962	585	
	6	460.8			PCTA				Dry	E	97	1969	1105	
		1221.3	65	42.94		99 des. p-coal	1	-						

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: OHIO

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} $\frac{BTU}{yr}$	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANS. DISTANCE miles
Cincinnati SMSA - cont'd													
2. West End (Cincinnati Gas & Electric)													
Boiler 5-1	107			GFRO	-	-	100	None	None	-	1937	155	8
5-2				GFRO	-	-	100	None	None	-	1937		
5-3				GFRO	-	-	100	None	None	-	1938		
6-1	112.3			GFRO	-	-	100	None	None	-	1948	160	
6-2				GFRO	-	-	100	None	None	-	1948		
6-3				GFRO	-	-	100	None	None	-	1948		
	219.3	26	7.69		-	-	100						
					des. gas								
28. Miami Fort (Cincinnati Gas & Electric)													
Boiler 1	63			PCFR	100	-	-	Dry	None	-	1925	100	15
2	63			PCFR	100	-	-	Dry	None	-	1926	100	
3	65			PCFR	100	-	-	Wet	None	-	1938	105	
4	65			PCFR	100	-	-	Wet	None	-	1942	105	
5	100			PCFR	100	-	-	Dry	None	-	1949	160	
6	163.2			PCTA	100	-	-	Dry	C	94	1960	265	
	519.2	41	20.01		100	-	-						
					des. p-coal								

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: OHIO

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} $\frac{BTU}{yr}$	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANS. DISTANCE Miles
CINCINNATI SMSA-cont'd													
Ind. 6 Tanners Creek, Dearborn Co., Ind. (Indiana & Michigan Elec. Co.)													
Boiler 1				PCFR	100	-	-	Dry	MCTA	77.9(t)			20
2				PCFR	100	-	-	Dry	MCTA	75			
3				PCFR	100	-	-	Dry	MCTA	72.2(t)			
4				CYCL	100	-	-	Dry	MCTA	74.7			
	1100.3	48	43.77		100 des. p-coal	-	-					1875	
AREA TOTAL	3060.1		114.41										
Cleveland SMSA													
26. Painesville* (Painesville Electric Lgt. Dept)													
Boiler 1	6.5			OSTO				Dry	None	-	1938	10	35
2	7.5			OSTO				Dry	None	-	1947	15	
3	7.5			SPRE				Dry	MCAX	94.3(d)	1954	15	
4	16.5			SPRE				Dry	MCAX	94.3(d)	1960	30	
	38.0	33	1.85		100 des. coal/oil	-	-						

* [illegible] xpanded 1974

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: OHIO

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} $\frac{BTU}{yr}$	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANSPORT DISTANCE MILES
CLEVELAND SMSA - cont'd													
5. EASTLAKE													
Cleveland Electric Illum.Co.													
Boiler 1	123			PCTA	100	-	-	Dry	C	98	1953	365	22
2	123			PCTA	100	-	-	Dry	C	98	1953	365	
3	123			PCTA	100	-	-	Dry	C	98	1954	365	
4	208			PCTA	100	-	-	Dry	C	96	1956	620	
	577.0	81	40.38		100	-	-						
					des	p-coal							
6. CUYAHOGA													
Cleveland Electric Illum.Co.													
Boiler 91	60			PCFR	100	-	-	Wet	E	82	1941	140	<5
92	60			PCFR	100	-	-	Wet	E	82	1941	140	
93	69			PCFR	100	-	-	Wet	E	94	1951	160	
94	69			PCFR	100	-	-	Wet	E	94	1951	160	
18	256			PCTA	100	-	-	Dry	E	99	1962	605	
	514	58	28.55		100	-	-						
					des.	p-coal							

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: OHIO

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. $10^{12}\ \frac{BTU}{yr}$	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANS. DISTANCE Miles
CLEVELAND SMSA-cont'd													
43. Lake Road Cleveland Dept. of Public Utilities													
Boiler 1	80							Dry	MCTA	70	1941	145	5
2								Dry	MCTA	70	1941		
3								Dry	MCTA	70	1941		
4								Dry	C	70	1953		
5								Dry	C	70	1953		
6	85							Dry	E	98	1967	155	
	160	28	6.94		98	2	-						
					des.p-coal/oil								
AREA TOTAL	1289.0		77.72										
COLUMBUS SMSA													
30. PICWAY Columbus & So.Ohio Elec.													
Boiler 6				PCFR				Wet	None	-	1935		
7				PCFR				Wet	None	-	1945		
8				PCFR				Wet	None	-	1949		
9				PCFR				Dry	Cycl.	50	1955	Yes	5
	230.8	25	6.95		99	1	-					290	
					des	coal							
44. COLUMBUS City of Columbus Electric													
Boiler 6	12.5			SPRE				Dry	MCAX	92.3(t)	1938	10	
7	12.5			OSTO				Dry	None	-	1949	10	5

YEAR: 1971
STATE: OHIO

REFUSE COMBUSTION FOR POWER GENERATION

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} $\frac{BTU}{yr}$	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANSPORT DISTANCE MILES
COLUMBUS SMSA-cont'd													
44. Columbus-cont'd													
8	19			GFRO				None	None	-	1962	20	
9	12.5			GRFO				None	None	-	1969	10	
	56.5	25	1.51		32	2	66						
					des.s-coal/gas								
													Dayton 60
AREA TOTAL	287.3		8.46										
DAYTON SMSA													
7. HUTCHINGS Dayton Power & Light Co.													
Boiler 1	69			PCTA				Dry	MCTA	29.8	1948	140	10
2	69			PCTA				Dry	MCTA	32.8	1949	140	
3	69			PCTA				Dry	MCTA	80.8	1950	140	
4	69			PCTA				Dry	MCTA/E	85.8/ 99.9	1951	140	
5	69			PCTA				Dry	MCAX/E	84.8/ 99.9	1952	140	
6	69			PCTA				Dry	MCAX/E	81.8/ 99.9	1953	140	
	419	54	20.34		99	-	1						
					des	p-coal							

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: OHIO

SMSA-COUNTY/PLANT	RATED CAPACITY	LOAD FACTOR	ENERGY RQMT.	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU %			BOTTOM ASH HANDLING	AIR POLLUTION CONTROL		INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY"	TYPICAL TRANS. DISTANCE
	MW	%	10^{12} BTU/yr		COAL	OIL	GAS		TYPE	EFF. %		tons/day	Miles
Dayton SMSA-cont'd													
8. Tait													
Dayton Power & Light Co.													
Boiler 4	147			PCTA	100	-	-	Dry	C	94	1958	280	< 5
5	147.1			PCTA	100	-	-	Dry	C	94	1959	280	
7-1	37.5			PCFR	100	-	-	Dry	C	71	1937	70	
7-2	37.5			PCFR	100	-	-	Dry	C	71	1937	70	
8-1	37.5			PCFR	100	-	-	Dry	C	71	1940	70	
8-2	37.5			PCFR	100	-	-	Dry	C	71	1940	70	
	444.1	48	19.95		100 des.p-coal	-	-						
31. Troy													
Dayton Power & Light Co.	24.4	2	0.04		100 des.s-coal	-	-	*	*	*			17
40. Piqua													
Piqua Municipal Power Plant													
Boiler 1	33			OSTO				Dry	None	-	1933	75	30
2				OSTO				Dry	None	-	1933		
3				OSTO				Dry	None	-	1940		
4				OSTO				Dry	GRAV	80	1947		
5	20			OSTO				Dry	GRAV	80	1951	45	
6				OSTO				Dry	GRAV	90	1961		
	53	31	2.93		100 des.s-coal	-	-						
AREA TOTAL	935.5		43.26										

* No FPC 67 filed

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: OHIO

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} $\frac{BTU}{yr}$	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANS. DISTANCE Miles
HAMILTON-MIDDLETOWN SMSA													
37. Hamilton Hamilton Municipal Electric													
Boiler 1	38.5			under-feed				Dry	None	-	1929	85	10
2								Dry	None	-	1929		
3								Dry	None	-	1929		
4								Dry	None	-	1930		
5	10			OSTO				Dry	GRAV	70	1946	20	
6	10			OSTO				Dry	GRAV	70	1950	20	
7				SPRE				Dry	MCTA	90(d)	1960		
8	25			PCFR				Dry	MCTA	85	1966	50	
	83.5	39	4.35		74 des.coal	1	25						
AREA TOTAL	83.5		4.35										Cincinnati 20 Dayton 30
LIMA SMSA													
32. Woodcock Ohio Power Company													
Boiler 1	12.5			PCFR				Dry	None	-	1938	15	15
2				PCFR				Dry	None	-	1938		
3				PCFR				Dry	None	-	1941		
4	12.5			PCFR				Dry	None	-	1947	15	
5	12.5			PCFR				Dry	MCTA	NR	1950	15	
	37.5	25	1.47		95 des.p-coal	5	-						

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: OHIO

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} $\frac{BTU}{yr}$	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANS. DISTANCE Miles
Lima SMSA-cont'd Mercer County													
34. Celina Celina Municipal Utilities	25	17	0.46		100 des.s-coal	-	-	*	*	*		15	30
42. St. Mary's St. Mary's Municipal Light & Power Dept.	22.6	15	0.36		98 des.s-coal	2	-	*	*	*		10	20
AREA TOTAL	85.1		2.29										Springfield 55 Dayton 55
Lorain-Elyria SMSA													
9. Edgewater Ohio Edison Co. Boiler 11 }	87.9			PCFR	100	-	-	Dry	MCTA	85(d)	1949	} 150	5
12 }				PCFR	100	-	-	Dry	MCTA	85(d)	1949		
13	105.0			PCFR	100	-	-	Dry	E	98	1957	180	
	192.9	40	7.84		100 des.p.coal	-	-						

* No FPC 67 filed

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: OHIO

SMSA-COUNTY/PLANT		RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} BTU/yr	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANSPORT DISTANCE MILES
LORAIN-ELYRIA SMSA - cont'd														
4. AVON LAKE Cleveland Electric Illuminating Company														10
Boiler	1	190			PCOP/ ROPP	100	-	-	Dry	E	95	1926, * 1928	415	
	2				PCOP/ ROPP	100	-	-	Dry	E	95			
	3				PCOP/ ROPP	100	-	-	Dry	E	95			
	4				PCOP/ ROPP	100	-	-	Dry	E	95			
	5				PCOP/ ROPP	100	-	-	Dry	E	95			
	6				PCOP/ ROPP	100	-	-	Dry	E	95			
	7				PCOP/ ROPP	100	-	-	Dry	E	95			
	8				PCOP/ ROPP	100	-	-	Dry	E	95			
	9	86			PCTA	100	-	-	Dry	E	95	1949	185	
	10	86			PCTA	100	-	-	Dry	E	95	1949	185	
	11	233			PCTA	100	-	-	Dry	E	97	1959	505	
		595	59	65.18		100	-	-						
						des.	p-coal/oil							
AREA TOTAL:		787.9		73.02										

* efficiency based on coal-firing

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: OHIO

SMSA-COUNTY/PLANT		RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} BTU/yr	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANSPORT DISTANCE MILES
MANSFIELD SMSA														
27. SHELBY Shelby Municipal Co.														
Boiler	1	12.5			PCFR	100	-	-	Dry	MCAX/E	99(t)	1967	25	12
	3	6			PCFR	100	-	-	Dry	MCAX/E	80/N.R.	1945	10	
	4	7.5			PCFR	100	-	-	Dry	MCAX/E	80/N.R.	1954	165	
		26	55*	2.13		100	-	-						
						des.	coal							
AREA TOTAL:		26.0		2.13										
SPRINGFIELD SMSA														
11. MAD RIVER Ohio Edison Co.														
Boiler	1	25			OSTO	100	-	-	Dry	MCTA	55	1927	35	<5
	2	25			OSTO	100	-	-	Dry	MCTA	55	1927	35	
	3	25			PCTA	100	-	-	Dry	MCTA	79	1938	35	
	4	25			PCFR	100	-	-	Dry	MCTA	80	1949	35	
		100	29	2.80		100	-	-						
						des s & p-coal								
AREA TOTAL:		100.0		2.80										

* State average

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: OHIO

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} $\frac{BTU}{yr}$	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANSPORT DISTANCE MILES
WHEELING-STEUBENVILLE-WEIRTON SMSA*													
17. TIDD Ohio Power Company													
Boiler 11	113.1			PCTA				Dry	MCTA	30	1945		10
12				PCTA				Dry	MCTA	30	1945	250	
21	113.2			PCFR				Dry	MCTA	73	1948	250	
	226.3	60	14.08		99	1	-						
					des	p-coal							
18. CARDINAL Ohio Power Co.&Buckeye Rural Corp. (Op.by Cardinal Operating Co.)													
Boiler 1	615.2			PCFR				Dry	E	92	1967	1615	10
2	615.2			PCFR				Dry	E	92	1967	1615	
	1230.4	74	75.93		99	1	-						
					des	p-coal							

*Steubenville-Weirton SMSA and Wheeling SMSA are two separate SMSA's combined into one unit for the purpose of this study.

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: OHIO

SMSA-COUNTY/PLANT		RATED CAPACITY	LOAD FACTOR	ENERGY RQMT.	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU %			BOTTOM ASH HANDLING	AIR POLLUTION CONTROL		INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY"	TYPICAL TRANSPORT DISTANCE MILES
		MW	%	10^{12} $\frac{\text{BTU}}{\text{yr}}$		COAL	OIL	GAS		TYPE	EFF. %		tons/day	
WHEELING-STEUBENVILLE-WEIRTON SMSA - cont'd														
29. BURGER Ohio Edison Co.														
	Boiler 1	31.25			PCFR	100	-	-	Dry	MCTA	80	1944	75	10
	2	31.25			PCFR	100	-	-	Dry	MCTA	80	1944	75	
	3	31.25			PCFR	100	-	-	Dry	MCTA	80	1947	75	
	4	31.25			PCFR	100	-	-	Dry	MCTA	80	1947	75	
	5	50			PCFR	100	-	-	Dry	MCTA	80	1950	125	
	6	50			PCFR	100	-	-	Dry	MCTA	80	1950	125	
	7	159.5			PCFR	100	-	-	Dry	C	97	1955	400	
	8	159.5			PCFR	100	-	-	Dry	C	97	1955	400	
		544.0	64	32.12		100	-	-						
						des	p-coal							
33. MARTINS FERRY Ohio Power Co.														
		6.5	6	0.04		100	-	-	*	*	*		-	5
						des	p-coal							

* No FPC 67 filed

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: OHIO

SMSA-COUNTY/PLANT		RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} BTU/yr	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANSPORT DISTANCE MILES
WHEELING-STEUBENVILLE-WEIRTON SMSA- cont'd														
13. SAMMIS Ohio Edison														
Boiler	1	185			PCFR	100	-	-	Dry	E	97	1959	275	10
	2	185			PCFR	100	-	-	Dry	E	97	1960	275	
	3	185			PCFR	100	-	-	Dry	E	97	1961	275	
	4	185			PCFR	100	-	-	Dry	E	97	1962	275	
	5	317.5			PCOP	100	-	-	Dry	E	99	1967	470	
	6	623			PCOP	100	-	-	Dry	E	99	1969	925	
	7	623			PCOP	100	-	-	Dry	E	99	1971	925	
		2303.5	43	81.29		100	-	-						
						des	p-coal							
14. TORONTO Ohio Edison														
Boiler	9	43.8				100	-	-	Wet	MCAX	85(d)	1940	100	5
	10	66				100	-	-	Dry	MCAX	85(d)	1949	155	
	11	66				100	-	-	Dry	MCAX	85(d)	1949	155	
		175.8	45	9.85		100	-	-						
						des	p-coal							

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REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: OHIO

SMSA-COUNTY/PLANT		RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} $\frac{BTU}{yr}$	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANSPORT DISTANCE MILES
WHEELING-STEUBENVILLE-WEIRTON SMSA Cont'd														
WV 13 WINDSOR, W.Virginia Beechbottom Power Co.														
Boiler	72	150		-	PCTA				Dry	MCTA	77	1939	240	10
	74				PCTA				Dry	MCTA	77	1939		
	82	150			PCTA				Dry	MCTA	77	1941	240	
	84				PCTA				Dry	MCTA	77	1941		
		300	24	11.55		99	1	-						
						des	p-coal							
WV 11 KAMMER, W.Virginia Ohio Power Company														
Boiler	1				CYCL	100	-	-	Wet	MCTA	85	1958		11
	2				CYCL	100	-	-	Wet	MCTA	85	1958		
	3				CYCL	100	-	-	Wet	MCTA	85	1959		
		712.5	58	35.94		100	-	-						
						des	p-coal						1540	
WV 14 MITCHELL, W.Virginia Ohio Power Company														
Boiler	1	816.3			PCOP				Dry	E	96.88	1971	1535	13
	2	816.3			PCOP				Dry	E	98.33	1971	1535	
		1632.6	53*	72.19		98	2	-						
						des p-coal								
AREA TOTAL:		7131.6		332.99										

* This plant started up in 1971 with an actual plant factor of 25% . The energy requirement shown here is based on a 53% factor, the average for W.Va.

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: OHIO

SMSA-COUNTY/PLANT		RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} $\frac{BTU}{yr}$	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANSPORT DISTANCE MILES
TOLEDO SMSA														
20. ACME														
Toledo Edison Co.														
Boiler	16				Top-fired				Dry	C	98.5	1951		<5
	13				Top-fired				Dry	MCTA	99.5	1938		
	14				Top-fired				Dry	MCTA	99.5	1941		
	15				Top-fired				Dry	MCTA	99.5	1941		
	91				Top-fired				Dry	C	96.5	1949		
	92				Top-fired				Dry	C	96.5	1949		
		307	30	10.74		82	10	8					435	
						des	p-coal/oil							
21. BAYSHORE														
Toledo Edison Co.														
Boiler	1	140			Top-fired	100	-	-	Dry	C	98	1955	345	10
	2	140			Top-fired	100	-	-	Dry	C	96.7	1959	345	
	3	140			PCFR	100	-	-	Dry	E	99.5	1963	345	
	4	219.6			PCFR	100	-	-	Dry	E	99	1968	545	
		639.5	72	37.26		100	-	-						
						des	p-coal							

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: OHIO

SMSA-COUNTY/PLANT		RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} BTU/yr	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANSPORT DISTANCE MILES
TOLEDO SMSA - cont'd														
MICH 5 WHITING Consumer Power Co.														
Boiler	1	100			PCFR	100	-	-	Dry	MCAX	85	1952	285	
	2	100			PCFR	100	-	-	Dry	MCAX	85	1952	285	7
	3	125			PCFR	100	-	-	Dry	MCAX	86	1953	355	
		325	77	21.76		100	-	-						
						des	p-coal							
MICH 18 MONROE Detroit Edison														
Boiler	1	817.2	59 *		PCOP									
		817.2		40.73		97	3	-	Dry	E	96	1971	1725	20
						des	p-coal							
AREA TOTAL:		2088.7		110.49										

* Based on a load factor of 59% (average for Michigan). This plant was started up in 1971, and had a load factor of 30% for that year.

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: OHIO

SMSA-COUNTY/PLANT		RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} BTU/yr	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANSPORT DISTANCE MILES
YOUNGSTOWN-WARREN SMSA														
12. NILES Ohio Edison Company														
Boiler	1	125			Cycl	100	-	-	Wet	MCAX	70	1954		10
	2	125			Cycl	100	-	-	Wet	MCAX	70	1954		
		250	63	14.06		100	-	-						
						des	p-coal							
AREA TOTAL:		250		14.06										
ASHTABULA COUNTY														
3. ASHTABULA Cleveland Elec. Illum. Co.														
Boiler	1	200			PCOP	100	-	-	Dry	E	75	1930-1931	395	<5
	2				PCOP	100	-	-	Dry	E	75			
	3				PCOP	100	-	-	Dry	E	75			
	4				PCOP	100	-	-	Dry	E	75			
	5				PCOP	100	-	-	Dry	E	75			
	6				PCOP	100	-	-	Dry	E	75			
	7	255			PCTA	100	-	-	Dry	E	96	1958	500	
		456	48	20.98		100	-	-						
						des	p-coal							
AREA TOTAL:		456		20.98										Cleveland 55 Warren-Youngstown 55

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: OHIO

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} $\frac{BTU}{yr}$	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANSPORT DISTANCE MILES
1971													
ATHENS COUNTY													
46. POSTON Columbus & S. Ohio Elec. Co.													
Boiler 1				PCFR	100	-	-	Dry	MCTA	50	1949		
2				PCFR	100	-	-	Dry	MCTA	50	1950		5
3				PCFR	100	-	-	Dry	MCAX	50	1952		
4				PCTA	100	-	-	Dry	MCAX	50	1954		
	232	54	14.58		100	-	-					615	
					des	p-coal							Columbus 65
AREA TOTAL:	232		14.58										
BROWN COUNTY													
25. STUART Dayton Power & Light Co.													
Boiler 1	610.2			PCOP				Dry	E	86(t)	1970	1045	
2	610.2			PCOP				Dry	E	92(t)	1971	1045	
	1220.4	50	49.43		99	1	-						15
					des	p-coal							Cincinnati 50
AREA TOTAL:	1220.4		49.43										

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: OHIO

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} $\frac{BTU}{yr}$	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANSPORT DISTANCE MILES
COLUMBIANA COUNTY													
41. READING City of Reading													
	15.3	32	0.52		100	-	-	*	*	*		20	12
					des	p-coal							
36. EAST PALESTINE East Palestine Lgt. & Water													
	16.5	19	0.32		100			*	*	*		10	12
					des	p-coal							Warren-Youngstown 20 Akron 40
AREA TOTAL:	31.8		0.84										
COSHOCTON COUNTY													
24. CONESVILLE Columbus & S. Ohio													
Boiler 1				Cycl				Wet	None	-	1954		
2				Cycl				Wet	None	-	1957		
3				PCFR				Dry	Cycl	60	1962		10
	433.5	67	26.55		100	-	-					1130	Columbus 60 Canton 50
					des	p-coal							
AREA TOTAL:	433.5		26.55										

* No FPC-67 filed

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: OHIO

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} BTU/yr	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANSPORT DISTANCE MILES
GALLIA COUNTY													
19. KYGER CREEK Ohio Valley Elec. Corp.													
Boiler 1	217.3			PCFR	100	-	-	Wet	C	96.1	1955	570	8
2	217.3			PCFR	100	-	-	Wet	C	96.1	1955	570	
3	217.3			PCFR	100	-	-	Wet	C	96.1	1955	570	
4	217.3			PCFR	100	-	-	Wet	C	96.1	1955	570	
5	217.3			PCFR	100	-	-	Wet	C	96.1	1955	570	
	1086.5	76	67.70		100	-	-						Huntington, W Va 45
					des p. coal								
AREA TOTAL:	1086.5		67.70										
HENRY COUNTY													
38. NAPOLEON Napoleon Minicipal Utilities													
	23.5	28	0.68		100	-	-	*	*	*	*	25	5
					des	coal							
AREA TOTAL:	23.5		0.68										Toledo 40 Lima 45

* No FPC-67 filed

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: OHIO

SMSA-COUNTY/PLANT		RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} BTU/yr	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANSPORT DISTANCE MILES
HURON COUNTY														
39. NORWALK Norwalk Municipal Light.														
Boiler	1				Front-fired				Dry	None	-	1955		
	2				OSTO				Dry	None	-	1935		
	3				OSTO				Dry	None	-	1941		12
	4				SPRE				Dry	MCAX	88	1961		
	5				PCFR				Dry	E	98	1969		
		31	24	0.77		99	1	-					30	Lorain-Elryia 25 Cleveland 45
						des	s-coal/oil							
AREA TOTAL:		31.0		0.77										
MORGAN COUNTY														
15. MUSKINGUM RIVER Ohio Power Company														
Boiler	1	214			PCFR	100	-	-	Wet	MCTA/E	80/99	1953	470	
	2	213			PCFR	100	-	-	Wet	MCTA/E	80/99	1954	470	
	3	229			Cycl	100	-	-	Wet	E	88	1957	505	7
	4	229			Cycl	100	-	-	Wet	E	88	1958	505	
	5	643.6			PCOP	100	-	-	Dry	C/E	85(t)/ 67.5	1968	1425	Columbus 65
		1529.6	63	85.16		100	-	-						
						des	p-coal							
AREA TOTAL:		1529.6		85.16										

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: OHIO

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. $10^{12}\ \frac{BTU}{yr}$	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANSPORT DISTANCE MILES
MUSKINGUM COUNTY													
16. PHILO Ohio Power Company													
Boiler 2-1	*			OSTO	100	-	-	Dry	None	-	1924		
2-4				OSTO	100	-	-	Dry	None	-	1924		10
31				OSTO	100	-	-	Dry	None	-	1929		
32				OSTO	100	-	-	Dry	None	-	1929		
33				OSTO	100	-	-	Dry	None	-	1929		
35				OSTO	100	-	-	Dry	None	-	1929		
36				OSTO	100	-	-	Dry	None	-	1929		
37				OSTO	100	-	-	Dry	None	-	1929		
34				PCFR	100	-	-	Dry	MCTA	84	1931		
38				PCFR	100	-	-	Dry	MCTA	84	1931		
41				PCFR	100	-	-	Dry	MCTA	86	1941		
42				PCFR	100	-	-	Dry	MCTA	86	1941		
51				PCFR	100	-	-	Dry	MCTA	84	1942		
52				PCFR	100	-	-	Dry	MCTA	84	1942		
6				Cycl	100	-	-	Wet	None	-	1957		
	500	34	19.57		100	-	-					840	Columbus 55 Wheeling 65
					des	s & p-coal							
AREA TOTAL:	500		19.57										

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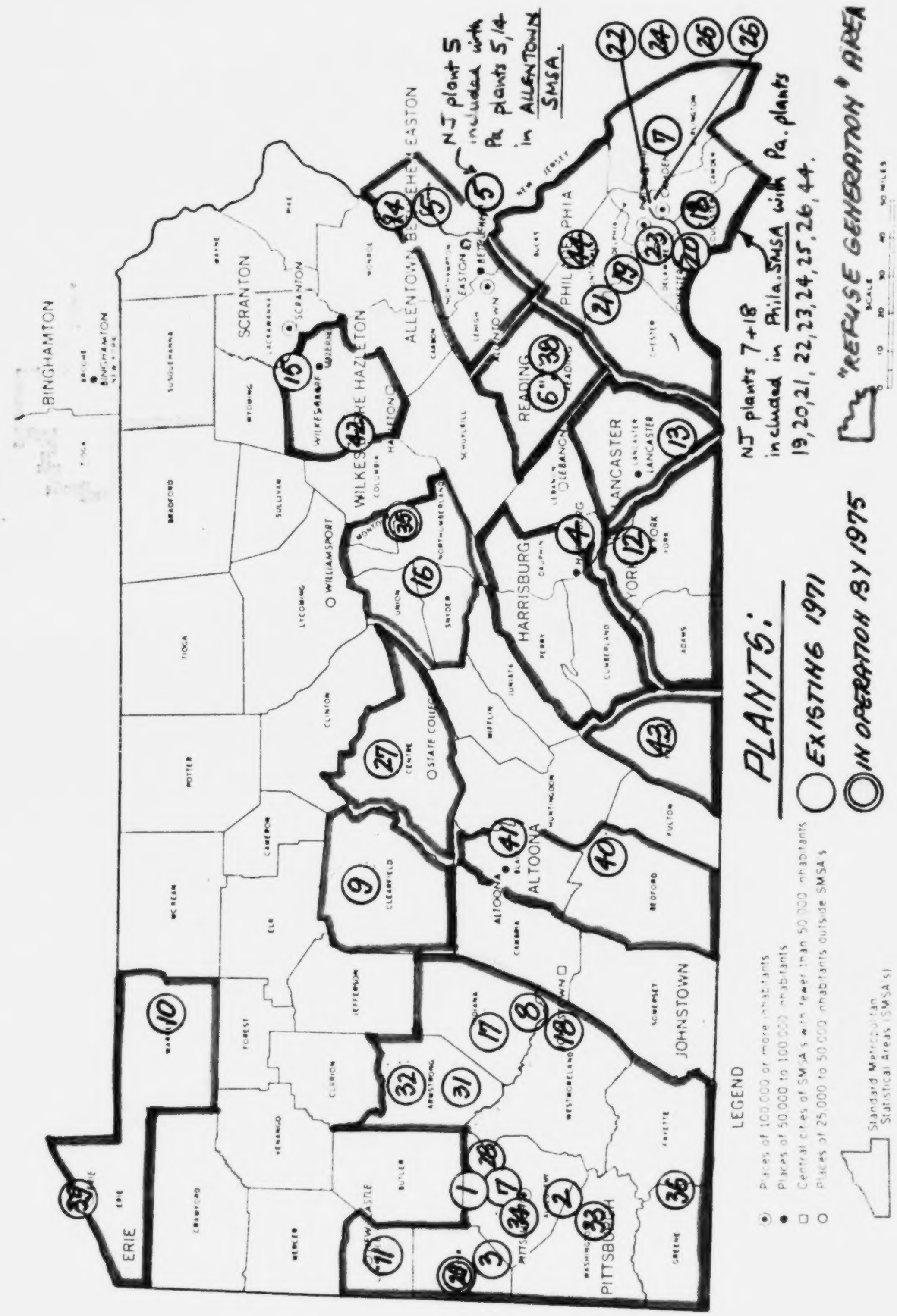
* Deactivated Reserve; boiler capacities not reported.

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: OHIO

SMSA-COUNTY/PLANT		RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} BTU/yr	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANSPORT DISTANCE MILES
TUSCARAWAS COUNTY														
35. DOVER Dover Electric Lgt.& Power		35.9	23	0.88	*	100	-	-	*	*	*		35	<5
						des	s-coal						Warren-Youngstown 60	
AREA TOTAL:		35.9		0.88										
WAYNE COUNTY														
22. VINE STREET Orville Municipal														
Boiler	1													
	2													
	3	44.5			*				*	*	*		30	9
	4													
	5													
	6	30										1971	15	
	7	30										1971	15	
		104.5	12	1.71		96	-	4						
						des. s. coal							Akron 20 Cleveland 40	
AREA TOTAL:		104.5		1.71										

* No FPC-67 filed


ERIE
PITTSBURGH
JOHNSTOWN
ALTOONA
WILLIAMSPORT
STATE COLLEGE
HARRISBURG
YORK
LANCASTER
READING
ALLENTOWN
BETHLEHEM
EASTON
PHILADELPHIA
WILKES-BARRE HAZLETON
SCRANTON
BINGHAMTON
NEW JERSEY
NJ plant 5 included with Pa. plants 5, 14 in ALLENTOWN SMSA.
NJ plants 7 + 18 included in Phila. SMSA with Pa. plants 19, 20, 21, 22, 23, 24, 25, 26, 44.
PLANTS:
EXISTING 1971
IN OPERATION BY 1975
"REFUSE GENERATION" AREA
LEGEND
Places of 100,000 or more inhabitants
Places of 50,000 to 100,000 inhabitants
Central cities of SMSA's with fewer than 50,000 inhabitants
Places of 25,000 to 50,000 inhabitants outside SMSA's
Standard Metropolitan Statistical Areas (SMSA's)
SCALE
0 10 20 30 40 50 MILES
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REFUSE COMBUSTION FOR POWER GENERATION

Pennsylvania, 1971 - All Fossil Fuel Plants

AREA	RATED CAPACITY MW	(b) ENERGY RQMT. 10^{12} $\frac{\text{BTU}}{\text{yr}}$	AREA POP. millions	(a) REFUSE GENERATION 10^6 $\frac{\text{tons}}{\text{yr}}$	(a) REFUSE GENERATION 10^{12} $\frac{\text{BTU}}{\text{yr}}$	POTENTIAL ENERGY SUPPLY FROM REFUSE (a/b%)	TYPICAL TRANS. DISTANCE miles
Allentown-Bethlehem-Easton SMSA	865.3	55.5	0.549	0.36	3.25	5.8	25
Altoona SMSA (incl. Bedford County)	70.9	4.5	0.180	0.11	1.06	23.3	18
Erie SMSA (incl. Warren Co.)	203.4	14.6	0.316	0.20	1.87	12.8	25
Harrisburg SMSA	117.0	4.5	0.418	0.27	2.47	54.3	10
Lancaster SMSA	105.0	8.5	0.325	0.21	1.92	22.6	15
Philadelphia SMSA	3660.2	205.3	4.893	3.21	28.94	14.1	10
Pittsburgh SMSA (incl. Lawrence Co, Green Co, Fayette Co, Indiana Co, and Armstrong Co)	10417.9	460.5	2.884	1.89	17.05	3.7	25
Reading SMSA	309.0	16.1	0.299	0.19	1.77	10.9	5
Wilkes-Barre-Hazelton SMSA	239.0	15.2	0.348	0.22	2.06	13.5	12
York SMSA	1558.7	84.0	0.334	0.21	1.97	2.3	15
Clearfield County	640.0	43.7	0.075	0.04	0.40	0.9	5
Centre County	46.0	3.5	0.101	0.06	0.54	15.2	10
Franklin County	19.1	0.8	0.102	0.06	0.54	63.3	5
Union-Snyder-Montour-Northumberland Counties	409.8	31.3	0.175	0.10	0.94	3.0	10
PENNSYLVANIA STATE TOTALS	18661.3	948.5	11.002	7.36	64.78	6.8	

Includes all plants detailed on attached data sheets.

REFUSE COMBUSTION FOR POWER GENERATION
Pennsylvania, 1971 - "Coal Plants" Only

AREA	RATED CAPACITY MW	(b) ENERGY RQMT. $10^{12}\frac{BTU}{yr}$	AREA POP. millions	(a) REFUSE GENERATION $10^{6}\frac{tons}{yr}$		POTENTIAL ENERGY SUPPLY FROM REFUSE (a/b %)	TYPICAL TRANS. DISTANCE miles
				$10^{6}\frac{tons}{yr}$	$10^{12}\frac{BTU}{yr}$		
Allentown-Bethlehem-Easton SMSA	865.3	55.5	.549	.36	3.25	5.8	25
Altoona SMSA (incl. Bedford County)	70.9	4.5	.180	.11	1.06	23.3	18
Erie SMSA (incl. Warren Co.)	203.4	14.6	.316	.20	1.87	12.8	25
Harrisburg SMSA	117.0	4.5	.418	.27	2.47	54.3	10
Lancaster SMSA	105.0	8.5	.325	.21	1.92	22.6	15
Philadelphia SMSA	3334.8	187.1	4.893	3.21	28.94	15.5	10
Pittsburgh SMSA (incl. Lawrence, Greene, Fayette, Indiana and Armstrong Counties)	10417.9	460.5	2.884	1.89	17.05	3.7	25
Reading SMSA	309.0	16.1	.299	.19	1.77	10.9	<5
Wilkes-Barre-Hazelton SMSA	239.0	15.2	.348	.22	2.06	13.5	12
York SMSA	1558.7	84.0	.334	.219	1.97	2.3	15
Clearfield County	640.0	43.7	.075	.04	0.40	0.9	5
Centre County	46.0	3.5	.101	0.06	0.54	15.2	10
Franklin County	19.1	0.8	.02	0.06	0.54		
Union-Snyder-Montour Northumberland Counties	409.8	31.3	.175	0.10	0.94	3.0	
PENNSYLVANIA STATE TOTALS	18335.9	930.3	11.002	7.19	64.78	7.0	

Includes all plants capable* of burning coal (design fuel and/or current fuel). Includes all plants in attached data sheets except No. 25 (Philadelphia SMSA).

* Does not differentiate between types of firing -- assumes all types capable of refuse burning.

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE:PENNSYLVANIA

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} BTU/yr	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANS. DISTANCE miles
Allentown-Bethlehem-Easton SMSA													
5. Portland (Metropolitan Edison)													
Boiler 1*	174.7			PCTA				Dry	C	99	1958	435	25
2	252.0			PCTA				Dry	C/cat-ox desulf.	99/90	1962	630	
	426.7	69	25.28		99	1	-						
					des. p. coal								
14. Martins Creek (Pennsylvania Power & Light)													
Boiler 1	156.25			PCFR	100	-	-	Dry	E	85	1954	430	25
2	156.25			PCFR	100	-	-	Dry	E	85	1956	430	
	312.5	66	20.51		100	-	-						
					des. p. coal								
NJ 5. Gilbert (New Jersey Power & Light)													
Boiler 1	57.1			PCOP				Dry	E	88.8	1930	185	25
2				PCOP				Dry	E	88.8	1930		
3	69.0			PCTA				Dry	Cycl/E	90	1949	225	
	126.1	72	9.78		4	65	31						
					des. p. coal	oil	gas						
AREA TOTAL	865.3		(55.57)										

* Boiler capacities prorated to give plant total.

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: PENNSYLVANIA

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} $\frac{BTU}{yr}$	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANS. DISTANCE miles
Altoona SMSA Bedford County													
40. Saxton (Penn. Elec. Co.)													
Boiler 2	5.8			SPRE	100	-	-	Dry	-	-	1923	5	20
3	5.8			SPRE	100	-	-	Dry	-	-	1923	5	
4	5.8			SPRE	100	-	-	Dry	-	-	1923	5	
5	5.8			SPRE	100	-	-	Dry	-	-	1926	5	
6	5.8			SPRE	100	-	-	Dry	-	-	1926	5	
7	5.8			SPRE	100	-	-	Dry	-	-	1926	5	
8	6.1			SPRE	100	-	-	Dry	-	-	1926	5	
	40.9	14	0.98		100 des. p. Coal	-	-						
41. Williamsburg (Penn. Elec. Co.)													
Boiler 11				PCFR	100	-	-	Dry	Mech. Collect.	.78	1944		12
2				SPRE	100	-	-	Dry	-	-	1914 to 1921		
4				SPRE	100	-	-	Dry	-	-			
6				SPRE	100	-	-	Dry	-	-			
8				SPRE	100	-	-	Dry	-	-			
10				SPRE	100	-	-	Dry	-	-			
	30	68	3.56		100 des. s,p. coal	-	-					150	
AREA TOTAL	70.9		4.54										

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE:PENNSYLVANIA

SMSA-COUNTY/PLANT	RATED CAPACITY	LOAD FACTOR	ENERGY RQMT.	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU %			BOTTOM ASH HANDLING	AIR POLLUTION CONTROL		INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY"	TYPICAL TRANS. DISTANCE
	MW	%	10^{12} $\frac{BTU}{yr}$		COAL	OIL	GAS		TYPE	EFF. %		tons/day	Miles
Erie SMSA													
Warren County													
10. Warren (Penn. Elec. Co.)													
Boiler 1	21.15			PCFR	100	-	-	Dry	E	95	1948	75	40
2	21.15			PCFR	100	-	-	Dry	E	95	1948	75	
3	21.15			PCFR	100	-	-	Dry	E	95	1949	75	
4	21.15			PCFR	100	-	-	Dry	E	95	1949	75	
	84.6	75	7.14		100 des. p. coal	-	-						
39. Front Street													
Boiler 7	15.4			PCFR				Dry	E	80	1944	40	10
8	15.4			PCFR				Dry	E	80	1944	40	
9	44			PCTA				Dry	E	90	1952	115	
10	44			PCTA				Dry	E	90	1952	115	
	118.8	52	7.50		99 des. p. coal	1	-						
AREA TOTAL	203.4		14.64										

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE PENNSYLVANIA

SMSA-COUNTY/PLANT	RATED CAPACITY	LOAD FACTOR	ENERGY RQMT.	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU %			BOTTOM ASH HANDLING	AIR POLLUTION CONTROL		INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY"	TYPICAL TRANS. DISTANCE miles
	MW	%	10^{12} $\frac{BTU}{yr}$		COAL	OIL	GAS		TYPE	EFF. %		tons/day	
Clearfield County													
9. Shawville (Penn. Elec. Co.)													
Boiler 1	134			PCFR				Dry	C	95.8	1954	385	5
2	134			PCFR				Dry	C	95.8	1954	385	
3	186			PCTA				Dry	C	98.5	1959	535	Altoona 40
4	186			PCTA				Dry	C	98.5	1960	535	
	640	72	43.70		99 des. p. coal	1	-						
AREA TOTAL	640		43.70										
Lancaster SMSA													
13. Holtwood (Penn. Power & Light)													
Boiler 1	10			PCFR	100	-	-	Dry	E	85	1925	30	15
2	10			PCFR	100	-	-	Dry	E	85	1925	30	
3	10			PCFR	100	-	-	Dry	E	85	1925	30	
17	75			PCFR	100	-	-	Dry	C	97	1954	255	
	105	66	8.51		100 des. p. coal	-	-						
AREA TOTAL	105		8.51										

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: PENNSYLVANIA

SMSA-COUNTY/PLANT	RATED CAPACITY	LOAD FACTOR	ENERGY RQMT.	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU %			BOTTOM ASH HANDLING	AIR POLLUTION CONTROL		INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY"	TYPICAL TRANS. DISTANCE
	MW	%	10^{12} $\frac{BTU}{yr}$		COAL	OIL	GAS		TYPE	EFF. %		tons/day	miles
Centre County													
27. Milesburg (West Penn. Power Co.)													
Boiler 1	23			PCFR	100	-	-	Dry	C	81	1950	70	10
2	23			PCFR	100	-	-	Dry	C	86	1950	70	
	46	69	3.54		100	-	-						Altoona 45
					des. p. coal								
AREA TOTAL	46		3.54										
Harrisburg SMSA													
4. Crawford (Metropolitan Edison)													
Boiler 1	10			top fired				Dry	-	-	1924	15	10
2	10			top fired				Dry	-	-	1925	15	
3	10			top fired				Dry	-	-	1924	15	
4	10			top fired				Dry	-	-	1925	15	
5	10			top fired				Dry	-	-	1926	15	
6	15			top fired				Dry	-	-	1927	20	
7	26			PCOP				Dry	E	90	1947	40	
8	26			PCOP				Dry	E	90	1947	40	
	117	27	4.55		62	38	-						
					des. p. coal/oil								
AREA TOTAL	117		4.55										

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: PENNSYLVANIA

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} BTU/yr	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANS. DISTANCE miles
Philadelphia SMSA													
25. Schuylkill (Philadelphia Elec. Co.)													
Boiler 1*	188.6			RTAN	-	100	-	-	MCAX	66	1958	450	10
2	83.1			RTAN	-	100	-	-	MCAX	80	1968	195	
3				RTAN	-	100	-	-	MCAX	80	1968		
23	53.7			RTAN	-	100	-	-	E	90 (d)	1938	125	
24				RTAN	-	100	-	-	E	99 (d)	1938		
	325.4	66	18.24		-	100	-						
					des.	oil							
20. Chester (Philadelphia Elec. Co.)													
Boiler 1	126.5												
2				SPRE				DRY	None		1918-1924		10
3				SPRE				DRY	-				
4				SPRE				DRY	-			245	
5				SPRE				DRY	-				
6				SPRE				DRY	-				
7				SPRE				DRY	-				
8				SPRE				DRY	-				
9				SPRE				DRY	-				
11				SPRE				DRY	-				
13				SPRE				DRY	-				
15				SPRE				DRY	-				
18	129.5			SPRE				DRY	-				
20				PCFR				DRY	MCAX	85 coal 40 oil	1941		
	256	36	11.80	PCFR	1	73	26	DRY	MCAX	85 coal 40 oil	1941	250	
				des. p.	coal	oil	gas						

* Boiler capacities prorated to give plant total

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: PENNSYLVANIA

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} BTU/yr	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANS. DISTANCE miles
Philadelphia SMSA - cont'd													
NJ 7. Burlington (NJ) (PSE & G)													
Boiler 11 *	46.4			RFRO	-	100	-	None	None	-	1932	90	10
12	126.8			RFRO	-	100	-	"	E	95 (d)	1940	255	
13				RFRO	-	100	-	"	E	95 (d)	1940		
14	128.8			RFRO	-	100	-	"	E	95 (d)	1943	260	
15				RFRO	-	100	-	"	E	95 (d)	1943		
7	201.0			RFRO	-	100	-	"	C	97 (d)	1955	410	
	503	48	24.24		-	100	-						
				des.p.	coal	oil							
24. Richmond (Philadelphia Elec. Co.)													
Boiler 63 *	184.8			PCTA	-	100	-	DRY	MCAX/E	50	1950	475	10
64				PCTA	-	100	-	DRY	MCAX/E	50	1950		
49	119.9			OSTO	-	100	-	DRY	-	-	1926	310	
50				OSTO	-	100	-	DRY	-	-	1926		
51				OSTO	-	100	-	DRY	-	-	1926		
52				OSTO	-	100	-	DRY	-	-	1926		
53				OSTO	-	100	-	DRY	-	-	1926		
54				OSTO	-	100	-	DRY	-	-	1926		
55				OSTO	-	100	-	DRY	-	-	1926		
56				OSTO	-	100	-	DRY	-	-	1926		
57				OSTO	-	100	-	DRY	-	-	1926		
58				OSTO	-	100	-	DRY	-	-	1926		
59				OSTO	-	100	-	DRY	-	-	1926		
60				OSTO	-	100	-	DRY	-	-	1926		
65	170.1			PCFR	-	100	-	WET	MCAX/E	50	1935	440	
66				PCFR	-	100	-	WET	MCAX/E	50	1935		
	474.8	54	28.96		-	100	-						
				des.p.	coal	oil							

* Boiler capacities prorated to plant total.

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: PENNSYLVANIA

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} BTU/yr	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANS. DISTANCE miles
Philadelphia SMSA - Cont'd													
22. Delaware (Philadelphia Elec. Co.)													
Boiler 71				PCFR	-	100	-	DRY	MCAX/E	50	1953		10
81				PCFR	-	100	-	DRY	MCAX/E	55	1953		
13				SPRE	-	100	-	DRY	None		1920-1924		
14				SPRE	-	100	-	DRY	.				
15				SPRE	-	100	-	DRY	.				
16				SPRE	-	100	-	DRY	.				
17				SPRE	-	100	-	DRY	.				
18				SPRE	-	100	-	DRY	.				
19				SPRE	-	100	-	DRY	.				
20				SPRE	-	100	-	DRY	.				
21				SPRE	-	100	-	DRY	.				
22				SPRE	-	100	-	DRY	.				
23				SPRE	-	100	-	DRY	.				
24				SPRE	-	100	-	DRY	.				
	439.3	50	20.77		-	100	-					875	
				des.p.	coal	oil							
NJ 18. Gibbstown (NJ) (Atlantic City Elec. Dept.)	11.5	51	0.61	* des p.	coal			*	*	*		25	10
23. Eddystone (Philadelphia Elec. Co.)													
Boiler 1 **	351.7			PCTA				DRY	MCAX/E	99.4 (t)	1959	800	10
2	355.5			PCTA				DRY	MCAX/E	99.3 (t)	1960	805	
	707.2	68	37.56		99	1	-						
				des.p.	coal								

* No FPC-67 filed

** Boiler capacities prorated to give plant total

REFUSE COMBUSTION FOR POWER GENERATION

YEAR:1971
STATE: PENNSYLVANIA

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} $\frac{BTU}{yr}$	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANS. DISTANCE miles
Philadelphia SMSA													
21. Cromby (Philadelphia Elec. Co) Boiler 1				PCFR				DRY	MCAX/E	98.5 coal 55 oil	1954		10
Boiler 2				PCTA				DRY	MCAX/E	95 coal 50 oil	1955		
	417.5	72	26.08		22 des.p.coal	78 oil	-					1110	
19. Barbadoes (Philadelphia Elec. Co.) Boiler 31	66			PCFR				DRY	MCAX/E	90 coal 50 oil	1949	180	10
41	66			PCFR				DRY	MCAX/E	90 coal 50 oil	1949	180	
1	23			RFRO				DRY	-	-	1923	60	
2				RFRO				DRY	-	-	1923		
3				RFRO				DRY	-	-	1923		
4				RFRO				DRY	-	-	1923		
	155	59	10.12		9 des.p. coal	49 oil	42 gas						
44. Landsdale (Landsdale Elec. Dept.)	25.5	27	0.73		94 des.s.p. coal	4	-	*	*	*		30	10

* No FPC-67 filed

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: PENNSYLVANIA

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} BTU/yr	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANS. DISTANCE miles
Philadelphia SMSA-Cont'd													
26. Southwark													
(Philadelphia Electric Co.)													
Boiler 11				PCFR	-	100	-	DRY	MCAX/E	91.4	1947		10
12				PCFR	-	100	-	DRY	MCAX/E	91.4	1947		
21				PCFR	-	100	-	DRY	MCAX/E	92.7	1948		
22				PCFR	-	100	-	DRY	MCAX/E	92.7	1948		
	345	70	26.24		-	100	-						
				des.p. coal oil									
AREA TOTAL	3660.2		205.35									1120	

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: PENNSYLVANIA

SMSA-COUNTY/PLANT	RATED CAPACITY	LOAD FACTOR	ENERGY RQMT.	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU %			BOTTOM ASH HANDLING	AIR POLLUTION CONTROL		INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY"	TYPICAL TRANS. DISTANCE
	MW	%	10^{12} $\frac{\text{BTU}}{\text{yr}}$		COAL	OIL	GAS		TYPE	EFF. %		tons/day	miles
Reading SMSA													
6. Titus (Metropolitan Edison)													
Boiler 1	75			PCTA				Dry	E	96.7	1951	210	<5
2	75			PCTA				Dry	E	96.7	1951	210	
3	75			PCTA				Dry	E	96.7	1953	210	
	225	73	14.89		98	2	-						
					des. p. coal								
38. Eyler* (Metropolitan Edison)													
Boiler 1	42			PCOP				Dry	E	76.8(t)	1941	35	<5
2	42			PCOP				Dry	E	78.4(t)	1941	35	
	84	13	1.26		67	33	-						
AREA TOTAL	309		16.15		des. oil								
Wilkes-Barre-Hazleton SMSA													
42 Hunlock United Gas Improvement													
Boiler 1				OSTO				Dry	-	-	1925	20	5
3				OSTO				Dry	-	-	1925	20	
5				OSTO				Dry	-	-	1925	20	
2				PCTA				Wet	C	90	1947	45	
4				PCTA				Wet	-	-	1947	45	
6				PCTA				Wet	C	85	1959	145	
	93	53	6.91		99	1	-						
					des. s. p. coal								

* Boilers 3-8 were retired in 1971. These were identical coal-fired boilers(OSTO) with a capacity of 62MW, and were all built in 1923-1924.

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: PENNSYLVANIA

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} $\frac{BTU}{yr}$	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANS. DISTANCE miles
Wilkes Barre-Hazleton SMSA-Cont'd													
15. Stanton (Pennsylvania Power & Light)													
Boiler 1-1	50			OSTO	100	-	-	DRY	Cinder traps/ E	30	1927	120	15
1-2				OSTO	100	-	-	DRY	Cinder traps/ E	30	1927		
1-3				OSTO	100	-	-	DRY	Cinder traps/ E	30	1927		
1-4				OSTO	100	-	-	DRY	Cinder traps/ E	30	1927		
2-1	50			OSTO	100	-	-	DRY	Cinder traps/ E	30	1927	120	
2-2				OSTO	100	-	-	DRY	Cinder traps/ E	30	1927		
2-3				OSTO	100	-	-	DRY	Cinder traps/ E	30	1927		
2-4				OSTO	100	-	-	DRY	Cinder traps/ E	30	1927		
3	46			PCOP	100		-	WET	Grav/E	85	1953	110	
	146	41	8.31		100 des. S&P coal	-	-						
AREA TOTAL	239		15.23										

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: PENNSYLVANIA

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} BTU/yr	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANS. DISTANCE miles
PITTSBURGH SMSA													
1. Colfax Dusquesne Lgt. Co.													
Boiler 1 }	60*			OSTO	100	-	-	Dry	None	-	1921		5
2 }				OSTO	100	-	-	Dry	"	-	1920		
3				OSTO	100	-	-	Dry	"	-	1921		
4				OSTO	100	-	-	Dry	"	-	1921		
5				OSTO	100	-	-	Dry	"	-	1921		
6				OSTO	100	-	-	Dry	"	-	1920		
7				OSTO	100	-	-	Dry	"	-	1921		
8				OSTO	100	-	-	Dry	"	-	1920		
9				OSTO	100	-	-	Dry	"	-	1923		
10				OSTO	100	-	-	Dry	"	-	1922		
11				OSTO	100	-	-	Dry	"	-	1923		
12				OSTO	100	-	-	Dry	"	-	1922		
13				OSTO	100	-	-	Dry	"	-	1924		
14				OSTO	100	-	-	Dry	"	-	1922		
15				OSTO	100	-	-	Dry	" Cycl.	80(t)	1924		
16				OSTO	100	-	-	Dry	Cycl.	82(t)	1924		
17				PCFR	100	-	-	Dry	E	83(t)	1927		
18				PCFR	100	-	-	Dry	Cycl.	81(t)	1925		
19				PCFR	100	-	-	Dry	E	78	1927		
20				PCFR	100	-	-	Dry	Cycl.	63	1925		
21				PCFR	100	-	-	Dry	Cycl.	70	1927		
22				PCFR	100	-	-	Dry	Cycl.	85	1925		
	262.5	16	9.40		100 des. S & p. coal							410	

* Cold Reserve, not included in plant total

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: PENNSYLVANIA

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} BTU/yr	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANS. DISTANCE miles
PITTSBURGH SMSA cont'd													
3. Phillips (Dusquesne Lgt. Co.)													
Boiler 1				PCFR	100	-	-	Dry	C	90	1942		20
2				PCFR	100	-	-	Dry	C	90	1942		
3				PCFR	100	-	-	Dry	C	90	1949		
4				PCFR	100	-	-	Dry	C	90	1950		
5				PCFR	100	-	-	Dry	C	90	1950		
6				PCFR	100	-	-	Dry	C	92	1956		
	411.2	58	24.69		100							1050	
					des.p.coal								
8. Seward-Indiana Co. (Penn. Electric Co.)													
Boiler 9"				Rear fired				None	-	-	1942		40
12				PCFR				Dry	C	98	1942		
14				PCFR				Dry	C	97	1950		
15				PCTA				Dry	C	98	1957		
	268.2	63	16.27		97	3	-					685	
					des.p.coal	oil							
17. Homer City-Indiana Co. (Penn.Elec.Co.)													
Boiler 1	659.7			PCOP				Dry	E	94.5	1969	925	30
2	659.7			PCOP				Dry	E	94.5	1969	925	
	1319.4	37	43.26		98	2	-						
					des.p.	coal							

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: PENNSYLVANIA

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} $\frac{BTU}{yr}$	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANS. DISTANCE miles
Pittsburgh SMSA - Cont'd													
2. Elrama Duquesne Lgt. Co.													
Boiler 1				PCFR	100	-	-	Dry	C	92	1952		15
2				PCFR	100	-	-	Dry	C	92	1953		
3				PCFR	100	-	-	Dry	C	92	1954		
4				PCFR	100	-	-	Dry	C	92	1960		
	510.3	64	30.86		100	-	-						
					des.p.coal							1304	

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: PENNSYLVANIA

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} BTU/yr	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANS. DISTANCE miles
PITTSBURGH SMSA - Cont'd													
34. Reed (Dusquesne Lgt. Co.)													
Boiler 1				OSTO	100	-	-	Dry	None	-	1930		5
2				OSTO	100	-	-	Dry	"	-	1938		
3				OSTO	100	-	-	Dry	"	-	1930		
4				OSTO	100	-	-	Dry	"	-	1938		
5				OSTO	100	-	-	Dry	"	-	1930		
6				OSTO	100	-	-	Dry	"	-	1941		
	180	35	10.37		100	-	-						
					des.p.coal							440	
7. Cheswick Duquesne Lgt. Co.													
Boiler 1 -	565.3	59	27.87	PCTA	99	1	-	Dry	E	99	1970	1175	5
					des.p.coal								
28. Springdale (West Penn Power Co.)													
2				PCFR	100	-	-	Wet	E	81	1937	270	5
4				PCFR	100	-	-	Wet	E	70	1937		
6				PCFR	100	-	-	Wet	E	82	1938		
77				PCFR	100	-	-	Dry	E	83	1945	175	
88				PCFR	100	-	-	Dry	E	81.6	1954	285	
	416.13	37	17.25		100	-	-						
					des.p.coal								

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: PENNSYLVANIA

SMSA-COUNTY/PLANT	RATED CAPACITY	LOAD FACTOR	ENERGY RQMT.	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU %			BOTTOM ASH HANDLING	AIR POLLUTION CONTROL		INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY"	TYPICAL TRANS. DISTANCE
	MW	%	10^{12} BTU/yr		COAL	OIL	GAS		TYPE	EFF. %		tons/day	miles
Pittsburgh SMSA - Cont'd													
11. New Castle- Lawrence Co. Penn Power Co.													
Boiler 1	42.5			PCFR	100	-	-	Dry	E	98	1939	90	40
2	42.5			PCFR	100	-	-	Dry	E	96	1947	90	
3	103			PCFR	100	-	-	Dry	E	98	1952	220	
4	105			PCFR	100	-	-	Dry	E	95	1958	225	
5	132.8			PCFR	100	-	-	Dry	E	98	1964	285	
	425.8	49	22.35		100	-	-						
					des.p.coal								
32. Armstrong- Armstrong Co. West Penn Power Co.													
Boiler 1				PCOP	100	-	-	Dry	MCAX/E	96	1947		35
2				PCOP	100	-	-	Dry	MCAX/E	96	1948		
	326.4	70	22.40		100	-	-						
					des.p.coal							955	

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: PENNSYLVANIA

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} BTU/yr	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANS. DISTANCE miles
PITTSBURGH SMSA- Cont'd													
33. Mitchell West Penn Power Co.													
Boiler 1				PCFR	100	-	-	Dry	E	92	1948		15
2				PCFR	100	-	-	Dry	E	92	1948		
3				PCFR	100	-	-	Dry	E	92	1949		
33				PCTA	100	-	-	Dry	E	92	1963		
	448.7	64	26.43		100	-	-						
					des.p.coal		gas					1125	
36. Hatfields Ferry- Greene Co. West Penn Power Co.													
Boiler 1	576			PCOP	100	-	-	Dry	E	95	1969	795	40
2	576			PCOP	100	-	-	Dry	E	87	1970	795	
3	576			PCOP	100	-	-	Dry	E	90	1971	795	
	1728	38	58.85		100	-	-						
					des.p.coal								

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: PENNSYLVANIA

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} BTU/yr	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANS. DISTANCE miles
Pittsburgh SMSA-Con't.													
31. Keystone - Armstrong Co. (Penn. Power & Light)													
Boiler 1	936			PCTA				Wet	E	99.5	1967	1720	25
2	936			PCTA				Wet	E	99.5	1968	1720	
	1872	50	80.46		99	1	-						
					des. p. coal								
18. Conemaugh (Penn Power & Light)													
Boiler 1	842			PCTA				Dry	E	94	1970	1480	40
2	842			PCTA				Dry	E	94	1971	1480	
	1684	51	70.06		98	2	-						
					des.p.coal								
AREA TOTAL	10417.9		460.51										

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: PENNSYLVANIA

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. $10^{12}\frac{BTU}{yr}$	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANS. DISTANCE miles
Franklin County													
43. Chambersburg (Chambersburg Elec. Dept.)	19.1	43	0.86		52	-	48	*	*	*		35	[illegible]
					des. p. coal and gas								
												Harrisburg	48
AREA TOTAL	19.1		0.86										

* No FPC-67 filed

REFUSE COMBUSTION FOR POWER GENERATION

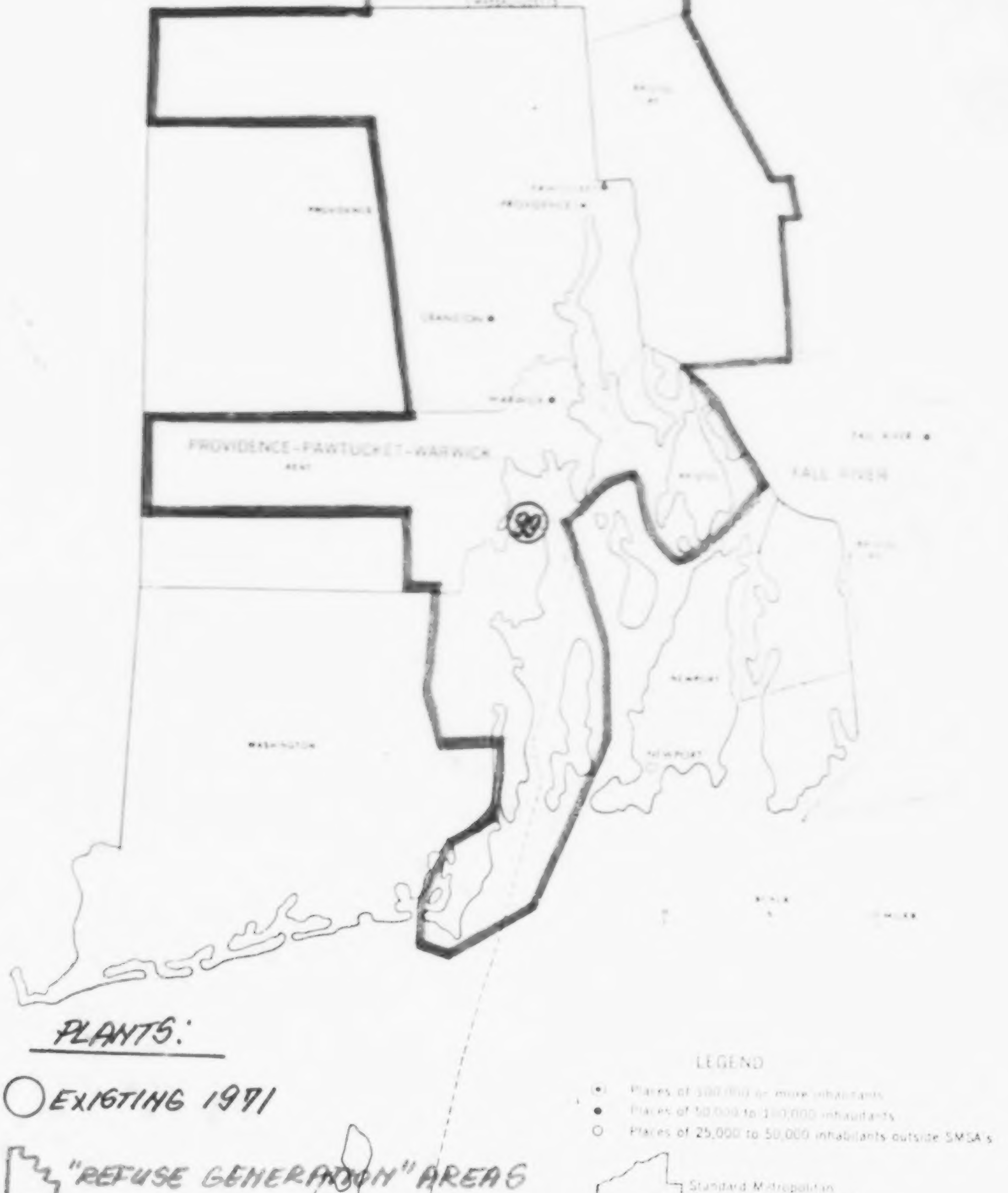
YEAR: 1971
STATE: PENNSYLVANIA

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} $\frac{BTU}{yr}$	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANS. DISTANCE miles
Union-Snyder-Montour-Northumberland Counties													
16. Sunbury (Penn. Power & Light)													
Boiler 1 (A,B)	150			PCOP	100	-	-	Dry	E	91	1949	490	10
2 (A,B)				PCOP	100	-	-	Dry	E	91	1949		
3	103.5			PCFR	100	-	-	Dry	E	93	1951	335	
4	156.3			PCFR	100	-	-	Dry	E	93(t)	1953	510	
	409.8	69	31.35		100	-	-						Harrisburg 40 Wilkes-Barre 50
					des. p. coal								
AREA TOTAL	409.8		31.35										

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: PENNSYLVANIA

SMSA-COUNTY/PLANT	RATED CAPACITY	LOAD FACTOR	ENERGY RQMT.	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU %			BOTTOM ASH HANDLING	AIR POLLUTION CONTROL		INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY"	TYPICAL TRANS. DISTANCE
	MW	%	10^{12} $\frac{BTU}{yr}$		COAL	OIL	GAS		TYPE	EFF. %		tons/day	miles
York SMSA													
12. Brunner Island													
Boiler 1	363.3			PCTA	100	-	-	Dry	E	97(t)	1961	830	15
2	405.0			PCTA	100	-	-	Dry	E	97(t)	1965	930	
3	790.4			PCTA	100	-	-	Dry	E	99	1969	1815	
	1558.7	62	84.08		100	-	-						
					des. p. coal								
AREA TOTAL	1558.7		84.08										


WORCESTER
NORFOLK
MASSACHUSETTS
BRISTOL
PAWTUCKET
PROVIDENCE
PROVIDENCE
CRANSTON
WARWICK
PROVIDENCE-PAWTUCKET-WARWICK
KENT
FALL RIVER
FALL RIVER
BRISTOL
WASHINGTON
NEWPORT
NEWPORT
MILES
PLANTS:
EXISTING 1971
"REFUSE GENERATION" AREAS
LEGEND
Places of 100,000 or more inhabitants
Places of 50,000 to 100,000 inhabitants
Places of 25,000 to 50,000 inhabitants outside SMSA's
Standard Metropolitan Statistical Areas (SMSA's)

REFUSE COMBUSTION FOR POWER GENERATION
Rhode Island, 1971 - "Coal Plants" Only

AREA	RATED CAPACITY MW	(b) ENERGY RQMT. $10^{12}\ \frac{\text{BTU}}{\text{yr}}$	AREA POP. millions	(a) REFUSE GENERATION		POTENTIAL ENERGY SUPPLY FROM REFUSE (a/b%)	TYPICAL TRANS. DISTANCE miles
				$10^{6}\ \frac{\text{tons}}{\text{yr}}$	$10^{12}\ \frac{\text{BTU}}{\text{yr}}$		
Providence-Pawtucket-Warwick SMSA	145.9	10.6	0.781	0.51	4.62	43.4	10

Data includes South Street Plant only; capable* of burning coal (design fuel and/or current fuel).

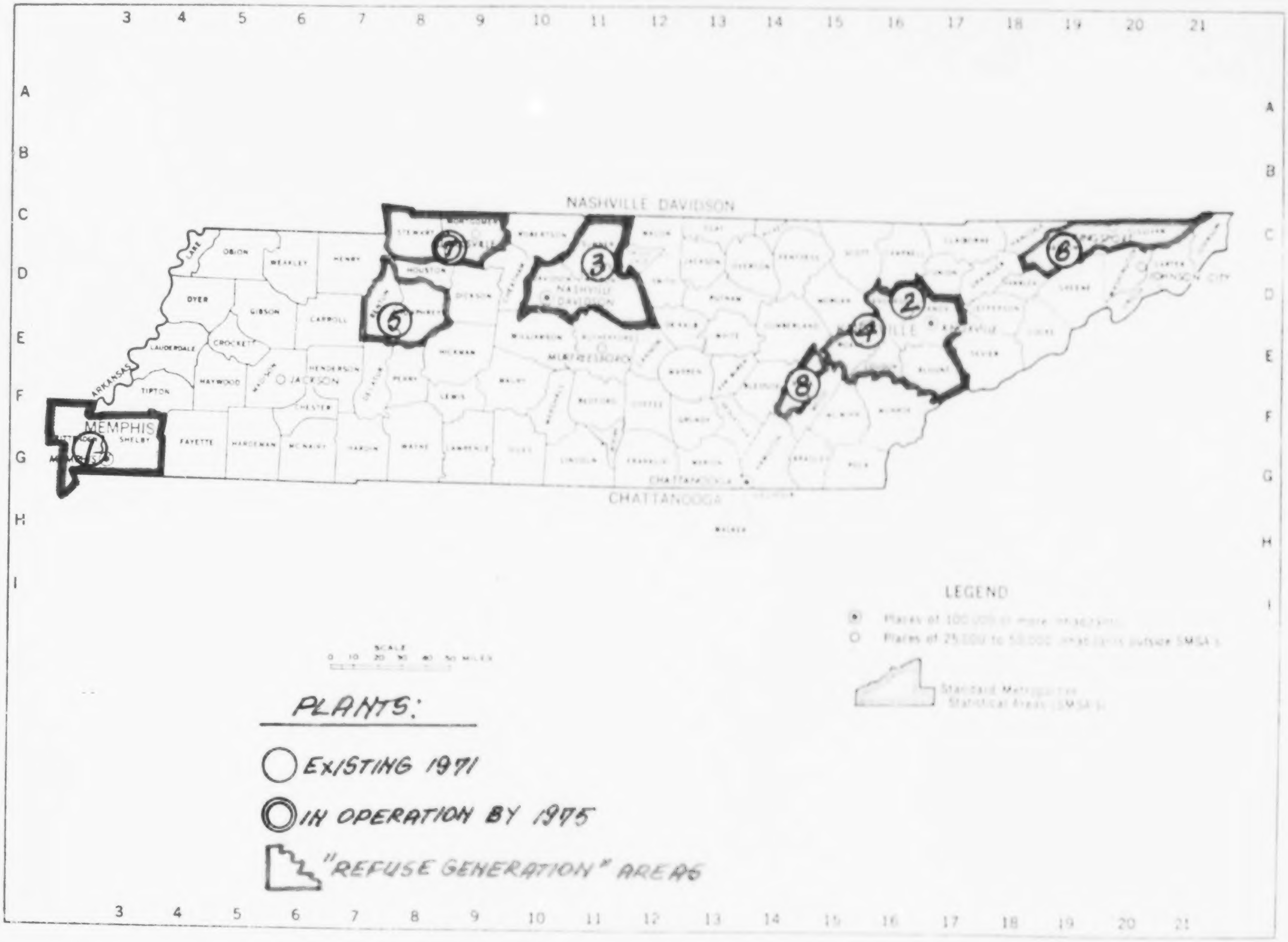
* Does not differentiate between types of firing--assumes all types capable of refuse burning.

REFUSE COMBUSTION FOR POWER GENERATION
Rhode Island, 1971 - All Fossil Fuel Plants - Identical to table above.

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: RHODE ISLAND

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} BTU/yr	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANS. DISTANCE miles
Providence - Pawtucket -Warwick SMSA													
South Street (Narragansett Elec. Co.)													
Boiler 121	110			RFRO	-	100	-	None	MCAX/E	[illegible]	1953	257	10
122				RFRO	-	100	-	None	MCAX/E	[illegible]	1953		
15	Boilers in range 2-13 MW			RFRO	-	100	-	None	None	-	1916	Boiler capacities from 5 to 30 tons/day	
17				RFRO	-	100	-	None	None	-	1917		
22				RFRO	-	100	-	None	None	-	1918		
24				RFRO	-	100	-	None	None	-	1918		
33				TOP FIRED	-	100	-	None	None	-	1925		
34				TOP FIRED	-	100	-	None	None	-	1925		
35				TOP FIRED	-	100	-	None	None	-	1925		
36				TOP FIRED	-	100	-	None	None	-	1925		
	145.9	44	10.64		- des. p. coal	100 oil	-						
AREA TOTAL	145.9		10.64										


NASHVILLE DAVIDSON
CHATTANOOGA
MEMPHIS
SHELBY
NASHVILLE DAVIDSON
MURFREESBORO
JACKSON
KNOXVILLE
JOHNSON CITY
ARKANSAS
LAKE
OBION
WEAKLEY
HENRY
STEWART
MONTGOMERY
HOUSTON
DYER
GIBSON
CARROLL
BENTON
HUMPHREYS
DICKSON
LAUDERDALE
CROCKETT
HENDERSON
PERRY
HICKMAN
TIPTON
HAYWOOD
MADISON
DECATUR
LEWIS
CHESTER
FAYETTE
HARDEMAN
MCNAIRY
HARDIN
WAYNE
LAWRENCE
ROBERTSON
SUMNER
WILLIAMSON
RUTHERFORD
MAURY
BEDFORD
COFFEE
WARREN
LINCOLN
FRANKLIN
MARION
GRUNDY
PUTNAM
WHITE
DEKALB
CUMBERLAND
JACKSON
OVERTON
FENTRESS
SCOTT
CAMPBELL
CLAIBORNE
ANDERSON
BLOUNT
SEVIER
JEFFERSON
COCKE
GREENE
CARTER
MONROE
POLK
1
2
3
4
5
6
7
8
A B C D E F G H I
3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21
SCALE
0 10 20 30 40 50 MILES
LEGEND
Places of 100,000 or more inhabitants
Places of 25,000 to 50,000 inhabitants outside SMSA's
Standard Metropolitan Statistical Areas (SMSA's)
PLANTS:
EXISTING 1971
IN OPERATION BY 1975
"REFUSE GENERATION" AREAS

REFUSE COMBUSTION FOR POWER GENERATION
Tennessee, 1971 - "Coal Plants" Only

AREA	RATED CAPACITY MW	(b) ENERGY RQMT. $10^{12}\frac{BTU}{yr}$	AREA POP. millions	(a) REFUSE GENERATION $10^{6}\frac{tons}{yr}$	(a) REFUSE GENERATION $10^{12}\frac{BTU}{yr}$	POTENTIAL ENERGY SUPPLY FROM REFUSE (a/b %)	TYPICAL TRANS. DISTANCE miles
Knoxville SMSA (incl. Roane and Loudon Counties)	2650	131.2	0.471	0.30	2.79	2.1	18
Memphis SMSA	990	43.9	0.782	0.51	4.63	10.5	< 5
Nashville-Davidson SMSA	1255.2	61.1	0.553	0.36	3.27	5.3	25
Benton-Humphreys Counties	1485.2	65.3	0.026	0.01	0.13	0.2	10
Rhea County	240.0	1.8	0.017	0.01	0.09	4.9	< 5
Sullivan-Hawkins Counties	823.3	36.9	0.163	0.09	0.87	2.4	34
TENNESSEE STATE TOTALS	7443.7	340.5	2.010	1.31	12.52	3.7	

Includes all plants capable* of burning coal (design fuel and/or current fuel). Includes all plants in attached data sheets.

* Does not differentiate between types of firing -- assumes all types capable of refuse burning.

REFUSE COMBUSTION FOR POWER GENERATION
Tennessee, 1971 - All Fossil Fuel Plants - Identical to above table

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: Tennessee

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} BTU/yr	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANS. DISTANCE miles
Rhea County													
8. Watts Bar TVA													
Boiler A	60			*	100	-	-	Wet & Dry	E	95	1969	25	<5
B	60			*	100	-	-	Wet & Dry	E	95	1969	25	
C	60			*	100	-	-	Wet & Dry	E	95	1969	25	
D	60			*	100	-	-	Wet & Dry	E	95	1969	25	
	240	10	1.86		100 des.p.coal	-	-						Knoxville 50 Chattanooga 50
AREA TOTAL	240		1.86										
Memphis SMSA													
1. Allen TVA													
Boiler 1	330			CYCL				Wet	E	70	1958	620	<5
2	330			CYCL				Wet	E	98.7(t)	1959	620	
3	330			CYCL				Wet	E	98.7	1959	620	
	990	52	43.92		59 des.coal	-	41 gas						
AREA TOTAL	990		43.92										

* P-coal multiple intertube vertical firing

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: Tennessee

SMSA-COUNTY/PLANT	RATED CAPACITY	LOAD FACTOR	ENERGY RQMT.	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU %			BOTTOM ASH HANDLING	AIR POLLUTION CONTROL		INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY"	TYPICAL TRANS. DISTANCE
	MW	%	10^{12} $\frac{BTU}{yr}$		COAL	OIL	GAS		TYPE	EFF. %		tons/day	miles
Sullivan-Hawkins Counties													
6. Sevier (TVA)													
Boiler 1 *	205.8			PCTA	100	-	-	Dry	MCTA	50	1955	385	34
2	205.8			PCTA	100	-	-	Dry	MCTA	50	1955	385	
3	205.8			PCTA	100	-	-	Dry	MCTA	50	1956	385	
4	205.8			PCTA	100	-	-	Dry	MCTA	50	1957	385	
	823.2	53	36.96		100 des.p.coal	-	-						Knoxville 60 Asheville, NC 60
AREA TOTAL	823.3		36.96										
Nashville-Davidson SMSA													
3. Gallatin (TVA)													
Boiler 1				PCTA	100	-	-	Dry	MCTA/E	60/92	1956		25
2				PCTA	100	-	-	Dry	MCTA/E	60/92	1957		
3				PCTA	100	-	-	Dry	MCTA/E	40/90	1959		
4				PCTA	100	-	-	Dry	MCTA/E	40/90	1959		
	1255.2	60	61.17		100 des.p.coal	-	-					3810	
AREA TOTAL	1255.2		61.17										

* Boiler capacities prorated to give plant total.

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: Tennessee

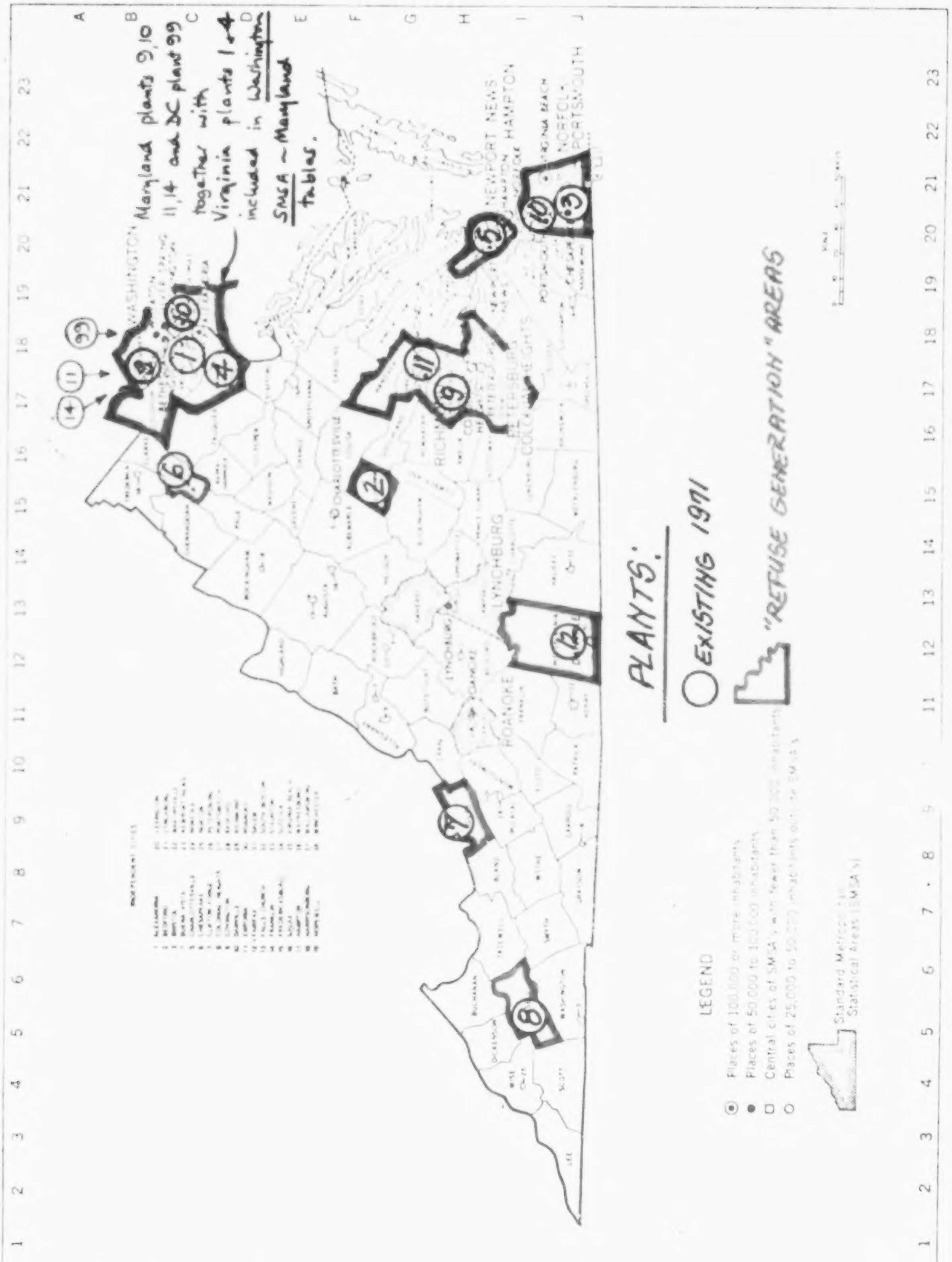
SMSA-COUNTY/PLANT	RATED CAPACITY	LOAD FACTOR	ENERGY RQMT.	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU %			BOTTOM ASH HANDLING	AIR POLLUTION CONTROL		INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY"	TYPICAL TRANS. DISTANCE
	MW	%	10^{12} $\frac{BTU}{yr}$		COAL	OIL	GAS		TYPE	EFF. %		tons/day	miles
Benton-Humphreys Counties													
5. Johnsonville A & B (TVA)													
Boiler A1 **	132.3			PCTA	100	-	-	Dry	MCTA	56(t)	1951	245	10
A2	132.3			PCTA	100	-	-	Dry	MCTA	60(t)	1951	245	
A3	132.3			PCTA	100	-	-	Dry	MCTA	60	1952	245	
A4	132.3			PCTA	100	-	-	Dry	MCTA	60	1952	245	
A5	132.3			PCTA	100	-	-	Dry	MCTA	60	1952	245	
A6	132.3			PCTA	100	-	-	Dry	MCTA	60	1953	245	Nashville 60
	793.8				100 des.p.coal	-	-						
B7 **	172.8			*	100	-	-	Dry	MCTA	81	1958	325	
B8	172.8			*	100	-	-	Dry	MCTA	81	1959	325	
B9	172.8			*	100	-	-	Dry	MCTA	81	1959	325	
B10	172.8			*	100	-	-	Dry	MCTA	81	1959	325	
	691.2				100 des.p.coal	-	-						
AREA TOTAL	1485.2	49	65.31										
Knoxville SMSA, Roane and Loudon Co.													
2. Bullrun (TVA)													
Boiler 1	950	61	45.66	PCTA	100 des.p.coal	-	-	Dry	E	81	1967	1955	15

* P. coal forced draft, circular, horizontal firing
** Boiler capacities prorated to give plant total.

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: Tennessee

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} $\frac{BTU}{yr}$	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANS. DISTANCE miles
Knoxville SMSA-Roane and Loudon Counties cont'd													
4. Kingston (TVA)													
Boiler 1				PCTA	100	-	-	Dry	MCTA/E	60/80	1954		20
2				PCTA	100	-	-	Dry	MCTA/E	60/80	1954		
3				PCTA	100	-	-	Dry	MCTA/E	60/80	1954		
4				PCTA	100	-	-	Dry	MCTA/E	60/80	1954		
5				PCTA	100	-	-	Dry	MCTA/E	50/85	1954		
6				PCTA	100	-	-	Dry	MCTA/E	50/85	1955		
7				PCTA	100	-	-	Dry	MCTA/E	50/85	1955		
8				PCTA	100	-	-	Dry	MCTA/E	50/85	1955		
9				PCTA	100	-	-	Dry	MCTA/E	50/85	1955		
	1700	60	85.62		100 des.p.coal	-	-						
AREA TOTAL	2650		131.28									3650	


Maryland plants 9,10
11,14 and DC plant 99
together with
Virginia plants 1-4
included in Washington
SMSA – Maryland
tables.
PLANTS:
○ EXISTING 1971
"REFUSE GENERATION" AREAS
WASHINGTON
CHARLOTTESVILLE
RICHMOND
PETERSBURG
COLONIAL HEIGHTS
LYNCHBURG
ROANOKE
NEWPORT NEWS
HAMPTON
NORFOLK
PORTSMOUTH
VIRGINIA BEACH
LEGEND
Places of 100,000 or more inhabitants
Places of 50,000 to 100,000 inhabitants
Central cities of SMSA's with fewer than 50,000 inhabitants
Places of 25,000 to 50,000 inhabitants outside SMSA's
Standard Metropolitan Statistical Areas (SMSA's)
1
2
3
4
5
6
7
8
9
10
11
12
14
99

REFUSE COMBUSTION FOR POWER GENERATION
Virginia, 1971 - All Fossil Fuel Plants

AREA	RATED CAPACITY MW	(b) ENERGY RQMT. $10^{12}\ \frac{\text{BTU}}{\text{yr}}$	AREA POP. millions	(a) REFUSE GENERATION		POTENTIAL ENERGY SUPPLY FROM REFUSE (a/b %)	TYPICAL TRANS. DISTANCE miles
				$10^6\ \frac{\text{tons}}{\text{yr}}$	$10^{12}\ \frac{\text{BTU}}{\text{yr}}$		
Newport News-Hampton SMSA	375.0	18.8	0.296	0.19	1.75	9.3	15
Norfolk-Portsmouth SMSA	749.6	35.3	0.684	0.44	4.04	11.4	15
Richmond-Petersburg-Colonial Heights SMSA's	1586.9	79.8	0.660	0.43	3.90	4.9	5
Warren County	34.5	1.7	0.016	0.00	0.09	5.3	5
Fluvanna County	284.3	13.6	0.008	0.00	0.04	0.3	5
Pittsylvania County	29	1.9	0.060	0.03	0.32	16.2	5
Giles County	402.5	20.5	0.017	0.01	0.09	0.4	5
Russell County	712.5	45.9	0.025	0.01	0.13	0.3	5
VIRGINIA STATE TOTALS	4174.3	217.7	1.766	1.15	10.36	4.8	

Includes all plants detailed on attached data sheets.

REFUSE COMBUSTION FOR POWER GENERATION
Virginia, 1971 - "Coal Plants" Only

AREA	RATED CAPACITY MW	(b) ENERGY RQMT. $10^{12}\frac{BTU}{yr}$	AREA POP. millions	(a) REFUSE GENERATION $10^{6}\frac{tons}{yr}$	(a) REFUSE GENERATION $10^{12}\frac{BTU}{yr}$	POTENTIAL ENERGY SUPPLY FROM REFUSE (a/b %)	TYPICAL TRANS. DISTANCE miles
Newport News-Hampton SMSA	375.0	18.8	0.296	0.19	1.75	9.3	15
Norfolk-Portsmouth SMSA	749.6	35.3	0.684	0.44	4.04	11.4	15
Richmond-Petersburg-Colonial Heights SMSA's	1586.9	79.8	0.660	0.43	3.90	4.9	5
Warren County	34.5	1.7	0.016	0.00	0.09	5.3	5
Fluvanna County	284.3	13.6	0.008	0.00	0.04	0.3	5
Pittsylvania County	29	1.9	0.060	0.03	0.32	16.2	5
Giles County	402.5	20.5	0.017	0.01	0.09	0.4	5
Russell County	712.5	45.9	0.025	0.01	0.13	0.3	5
VIRGINIA STATE TOTALS	4174.3	217.7	1.766	1.15	10.36	4.8	

Includes all plants capable* of burning coal (design fuel and/or current fuel). Includes all plants in attached data sheets.

* Does not differentiate between types of firing -- assumes all types capable of refuse burning.

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE:VIRGINIA

SMSA-COUNTY/PLANT	RATED CAPACITY	LOAD FACTOR	ENERGY RQMT.	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU %			BOTTOM ASH HANDLING	AIR POLLUTION CONTROL		INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY"	TYPICAL TRANS. DISTANCE
	MW	%	10^{12} $\frac{BTU}{yr}$		COAL	OIL	GAS		TYPE	EFF. %		tons/day	miles
Russell County													
8. Clinch River Appalachia Power Company													
Boiler 1 *	237.5			PCFR	100	-	-	Dry	MCTA	85	1958	650	
2	237.5			PCFR	100	-	-	Dry	MCTA	85	1958	650	5
3	237.5			PCFR	100	-	-	Dry	MCTA	85	1961	650	
	712.5	81	45.90		100 des p coal	-	-						Kingsport, Tenn 35
AREA TOTAL	712.5		45.9										
Pittsylvania County													
12. Brantly Danville Water, Gas & Electric													
Boiler 1	6			PCFR/GFRO				Dry	MCAX	84	1949	15	<5
2	11.5			PCFR/GFRO				Dry	MCAX	84.7	1952	30	
3	11.5			PCFR/GFRO				Dry	MCAX	84.7	1953	30	Roanoke 52
	29	70	1.97		31 des p coal	69 oil	- gas						Lynchburg 56
AREA TOTAL	29		1.97										

* Boiler capacities prorated to plant total.

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: VIRGINIA

SMSA-COUNTY/PLANT	RATED CAPACITY	LOAD FACTOR	ENERGY RQMT.	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU %			BOTTOM ASH HANDLING	AIR POLLUTION CONTROL		INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY"	TYPICAL TRANS. DISTANCE
	MW	%	10^{12} $\frac{BTU}{yr}$		COAL	OIL	GAS		TYPE	EFF. %		tons/day	miles
Richmond-Petersburg- Colonial Heights SMSA's (combined)													
9. Chesterfield Virginia Electric & Power Co.													
Boiler 1	62.5			PCTA				Dry	MECH	80	1944	140	5
2	69			PCTA				Dry	E	72	1949	155	
3	112.5			PCTA				Dry	C	72	1952	250	
4	187.5			PCTA				Dry	E	72	1960	420	
5	359			PCTA				Dry	E	72	1964	810	
6	693.9			PCTA				Dry	E	72	1969	1565	
	1484.4	58	79.07		17	83	-						
					des p coal		oil						
11. Richmond-12th St. Virginia Electric & Power Co.													
Boiler 17	52.5			PCTA				Wet	E	90	1936	20	5
18	50			PCTA				Wet	E	90	1939	20	
	102.5	8	0.80		96	4	-						
					des p coal								
AREA TOTAL	1586.9		79.87										
Warren County													
6. Riverton Potomac Edison Co. of Virginia													
Boiler 1	34.5	39	1.71	PCFR	100	-	-	Dry	MCAX	80	1949	70	Charlottesville 65 Washington 60 5
					des.p. coal								
AREA TOTAL	34.5		1.71										

REFUSE COMBUSTION FOR POWER GENERATION

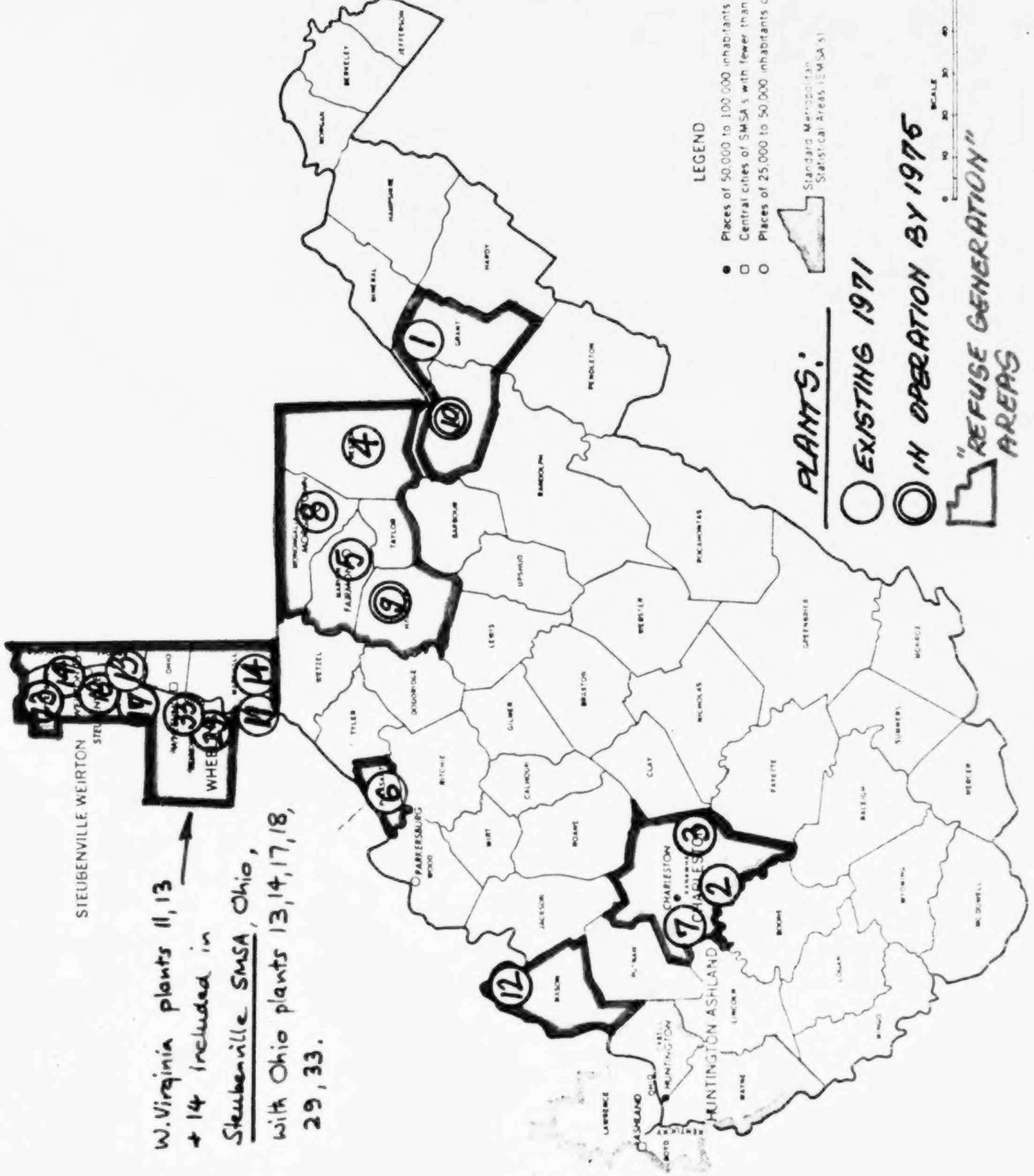
YEAR: 1971
STATE: Virginia

SMSA-COUNTY/PLANT	RATED CAPACITY	LOAD FACTOR	ENERGY RQMT.	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU %			BOTTOM ASH HANDLING	AIR POLLUTION CONTROL		INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY"	TYPICAL TRANS. DISTANCE
	MW	%	10^{12} BTU/yr		COAL	OIL	GAS		TYPE	EFF. %		tons/day	miles
Fluvanna County													
2. Bremo													
Virginia Electric & Power Co.													
Boiler 1	15			PCFR			-	Wet	None	-	1931	25	<5
2	15			PCFR			-	Wet	"	-	1931	25	
3	69			PCFR			-	Dry	MCAX	70	1950	135	Richmond 45
4	185.3			PCFR			-	Dry	MCAX	70	1958	370	Lynchburg 52
	284.3	52	13.6		99	1	-						
AREA TOTAL	284.3		13.6										
Giles County													
7. Glen Lyn													
Appalachia Power Co.													
Boiler 5				-				None	None	-	1922		<5
6				-				None	None	-	1922		
8				-				None	None	-	1922		
9				-				None	None	-	1923		
10 -	66.4			-				None	None	-	1923		
12				-				None	None	-	1923	140	
11 reserve				OSTO				Dry	None	-	1928		
13 "				PCFR				Dry	MCTA	85 (d)	1931		
51	111.1			PCTA				Dry	MCTA	85 (d)	1944	/ 20	Roanoke 50
52				PCTA				Dry	MCTA	85 (d)	1944		
6	225			PCFR				Dry	C	95 (d)	1957	490	
	402.5	59	20.53		97	3	-						
					des p,s coal								
AREA TOTAL	402.5		20.53										

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE:VIRGINIA

SMSA-COUNTY/PLANT	RATED CAPACITY	LOAD FACTOR	ENERGY RQMT.	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU %			BOTTOM ASH HANDLING	AIR POLLUTION CONTROL		INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY"	TYPICAL TRANS. DISTANCE
	MW	%	10^{12} $\frac{BTU}{yr}$		COAL	OIL	GAS		TYPE	EFF. %		tons/day	miles
Norfolk-Portsmouth SMSA													
3. Portsmouth Virginia Electric & Power Co.													
Boiler 1	112.5			PCTA				Dry	MCAX	65	1953	245	15
2	112.5			PCTA				Dry	MCAX	65	1954	245	
3	185.2			PCFR				Dry	MCAX	65	1959	405	
4	239.4			PCTA				Dry	E	70	1962	525	
	649.6	57	33.75		10	90	-						
					des. p coal	oil							
10. Reeves Avenue Virginia Electric & Power Co.													
Boiler 21	50.0			PCTA				Wet	E	70	1941	35	15
22	50.0			PCTA				Wet	E	70	1947	35	
	100.0	17	1.60		96	-	4						
AREA TOTAL	749.6		35.35		des p coal								
Newport News-Hampton SMSA													
5. Yorktown Virginia Electric & Power Co.													
Boiler 1	187.5			PCTA				Dry	C	98	1957	400	15
2	187.5			PCTA				Dry	MCAX	84	1958	400	
	375.0	56	18.85		100	-	-						
AREA TOTAL	375		18.85		des p coal		gas						


STEUBENVILLE WEIRTON
WHEELING
PARKERSBURG
CHARLESTON
HUNTINGTON ASHLAND
HUNTINGTON
ASHLAND
1
2
3
4
5
6
7
8
9
10
11
12
13
14
17
18
29
33
LEGEND
● Places of 50,000 to 100,000 inhabitants
□ Central cities of SMSA's with fewer than 50,000 inhabitants
○ Places of 25,000 to 50,000 inhabitants outside SMSA's
Standard Metropolitan Statistical Areas (SMSA's)
SCALE
0 10 20 30 40 50 MILES
PLANTS:
EXISTING 1971
IN OPERATION BY 1976
"REFUSE GENERATION" AREAS

W.Virginia plants 11, 13 + 14 included in Steubenville SMSA, Ohio, with Ohio plants 13, 14, 17, 18, 29, 33.

REFUSE COMBUSTION FOR POWER GENERATION
West Virginia, 1971 - "Coal fired Plants" Only

AREA	RATED CAPACITY MW	(b) ENERGY RQMT. $10^{12}\frac{BTU}{yr}$	AREA POP. millions	(a) REFUSE GENERATION $10^{6}\frac{tons}{yr}$	$10^{12}\frac{BTU}{yr}$	POTENTIAL ENERGY SUPPLY FROM REFUSE (a/b %)	TYPICAL TRANS. DISTANCE miles
Charleston SMSA	1529.2	73.3	0.231	0.15	1.37	1.9	12
Monongalia-Preston-Taylor-Harrison-Marion Counties	1605.1	96.4	0.238	0.14	1.27	1.3	15
Tucker-Grant Counties	1140.5	68.9	0.016	0.00	0.08	0.1	10
Pleasants County	215.0	15.7	0.007	0.00	0.03	0.2	<5
Mason County	1105.6	62.1	0.024	0.01	0.12	0.2	15
WEST VIRGINIA STATE TOTALS	5595.4	316.8	0.516	0.32	2.89	0.9	

Includes all plants capable* of burning coal (design fuel and/or current fuel). Includes all plants in attached data sheets.

* Does not differentiate between types of firing -- assumes all types capable of refuse burning.

REFUSE COMBUSTION FOR POWER GENERATION
West Virginia 1971 - All Fossil Fuel Plants - Identical to table above.

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: WEST VIRGINIA

SMSA-COUNTY/PLANT	RATED CAPACITY	LOAD FACTOR	ENERGY RQMT.	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU %			BOTTOM ASH HANDLING	AIR POLLUTION CONTROL		INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY"	TYPICAL TRANS. DISTANCE
	MW	%	10^{12} BTU/yr		COAL	OIL	GAS		TYPE	EFF. %		tons/day	miles
Charleston SMSA													
2. Cabin Creek													
Appalachia Power Company													
Boiler 1				OSTO				DRY	GRAV/ SCTA	15	1927		
3	*			OSTO				DRY	GRAV/ SCTA	15	1927		15
4				OSTO				DRY	GRAV	15	1929		
5				PCFR				DRY	MCAX	85	1931		
6				PCFR				DRY	MCAX	85	1931		
81	**			PCFR				DRY	MCAX	85	1942		
82				PCFR				DRY	MCAX	85	1942		
91				PCFR				DRY	MCAX	85	1943		
92				PCFR				DRY	MCAX	85	1943		
	273.5	33	9.22		99	1	-						
					des.s & p coal							390	
3. Kanawha River													
Appalachia Power Company													
Boiler 1	219.7			PCFR				DRY	E	95	1953		
2 -	219.7			PCFR				DRY	E	95	1953	630	
	439.4	84	29.65		100	—	—					630	15
					des.p.coal								
7. Amos													
Appalachian Power Company													
Boiler 1	816.3	53	34.49 ***	PCOP	98	2	-	DRY	E	95.3	1971	1470	8
AREA TOTAL	1529.2		73.36										

* Boilers on deactivated reserve.

** Boiler capacity breakdown not available

*** This plant was started up in 1971. The actual load factor for this year was 24%. The energy requirement is based on the average state load factor (53%) for calculation purposes.

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: WEST VIRGINIA

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} $\frac{BTU}{yr}$	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANS. DISTANCE miles
Mason County													
12. Philip Sporn													
Appalachia Power Company													
Boiler 1	*			PCFR				DRY	MCTA	79.3(t)	1950	1555	
2				PCFR				DRY	MCTA	85 (t)	1950		15
3				PCFR				DRY	MCTA	85 (t)	1951		
4				PCFR				DRY	MCTA	65.1(t)	1952		
5	450			PCOP				DRY	E	70.4(t)	1960	1070	
	1105.6	69	62.10		99	1	-						
AREA TOTAL	1105.6		62.10		des.p.coal								
Pleasants County													
6. Willow Island													
Monongalia Power Company													
Boiler 1				PCFR	100	-	-	DRY	MCAX	59	1949		
2				CYCL	100	-	-	WET	E	73	1960		<5
	215	78	15.77		100	-	-						
AREA TOTAL	215		15.77		des.p.coal							665	

* No breakdown available.

REFUSE COMBUSTION FOR POWER GENERATION

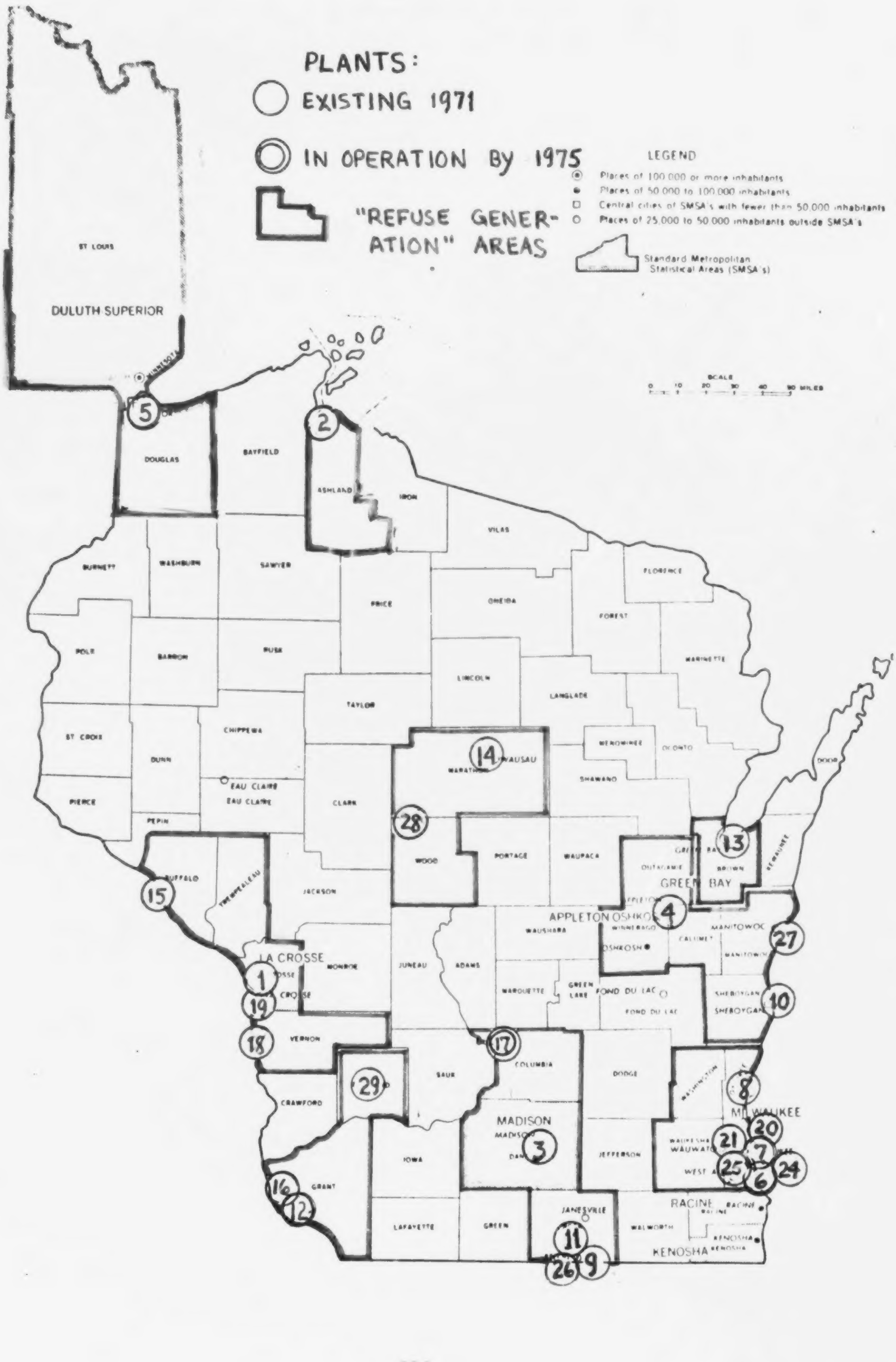
YEAR: 1971
STATE: WEST VIRGINIA

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} $\frac{BTU}{yr}$	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANS. DISTANCE miles
Monongalia-Preston-Taylor-Harrison-Marion Counties													
8. Fort Martin													
Monongalia Power Company													
Boiler 1	576			PCTA	100	-	-	DRY	E	99.4	1967	1345	15
2	576			PCOP	100	-	-	DRY	E	99	1968	1345	
	1152	69	63.29		100	-	-						
					des.p.coal								
4. Albright													
Monongalia Power Company													
Boiler 1	69			PCFR	100	-	-	DRY	MCAX	83	1952	250	25
2	209.3			PCFR	100	-	-	DRY	MCAX	83	1952	680	
3				PCTA	100	-	-	DRY	C	93	1952		
	278.3	79	21.41		100	-	-						
					des.p.coal								

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: WEST VIRGINIA

SMSA-COUNTY/PLANT	RATED CAPACITY	LOAD FACTOR	ENERGY RQMT.	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU %			BOTTOM ASH HANDLING	AIR POLLUTION CONTROL		INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY"	TYPICAL TRANS. DISTANCE
	MW	%	10^{12} BTU/yr		COAL	OIL	GAS		TYPE	EFF. %		tons/day	miles
Monongalia-Preston-Taylor-Harrison-Marion Counties cont'd													
5. Rivesville													
Monongalia Power Company													
Boiler 5				PCFR	100	-	-	WET	SCTA/ MULT. FILLER CONES	65	1936		<5
6				PCFR	100	-	-	WET	SCTA/ MULT. FILLER CONES	65	1936		
7				PCFR	100	-	-	DRY	SCTA/ IMPE	70	1944		
8				PCFR	100	-	-	DRY	SCTA/ IMPE	56	1951		
	174.8	53	11.72		100	-	-					495	
					des.p.coal								
AREA TOTAL	1605.1		96.42										
Tucker-Grant Counties													
1. Mt. Storm													
Virginia Electric & Power Co.													
Boiler 1	570.25			PCTA				DRY	E	85	1965	1460	10
2	570.25			PCTA				DRY	E	90	1966	1460	
	1140.5	70	68.90		99	1	-						
					des.p.coal								
AREA TOTAL	1140.5		68.90										


PLANTS:
EXISTING 1971
IN OPERATION BY 1975
"REFUSE GENERATION" AREAS
LEGEND
Places of 100,000 or more inhabitants
Places of 50,000 to 100,000 inhabitants
Central cities of SMSA's with fewer than 50,000 inhabitants
Places of 25,000 to 50,000 inhabitants outside SMSA's
Standard Metropolitan Statistical Areas (SMSA's)
SCALE
0 10 20 30 40 50 MILES
ST LOUIS
DULUTH SUPERIOR
MINNESOTA
DOUGLAS
BAYFIELD
ASHLAND
IRON
VILAS
BURNETT
WASHBURN
SAWYER
PRICE
ONEIDA
FLORENCE
FOREST
POLK
BARRON
RUSK
LINCOLN
LANGLADE
MARINETTE
TAYLOR
ST CROIX
DUNN
CHIPPEWA
EAU CLAIRE
EAU CLAIRE
MENOMINEE
OCONTO
DOOR
PIERCE
PEPIN
CLARK
MARATHON
WAUSAU
SHAWANO
WOOD
PORTAGE
WAUPACA
OUTAGAMIE
GREEN BAY
BROWN
KEWAUNEE
GREEN BAY
BUFFALO
TREMPEALEAU
JACKSON
APPLETON OSHKOSH
APPLETON
WINNEBAGO
CALUMET
MANITOWOC
MANITOWOC
WAUSHARA
OSHKOSH
LA CROSSE
LA CROSSE
LA CROSSE
MONROE
JUNEAU
ADAMS
MARQUETTE
GREEN LAKE
FOND DU LAC
FOND DU LAC
SHEBOYGAN
SHEBOYGAN
VERNON
SAUK
COLUMBIA
DODGE
WASHINGTON
OZAUKEE
MILWAUKEE
CRAWFORD
MADISON
MADISON
DANE
JEFFERSON
WAUKESHA
WAUWATOSA
WEST ALLIS
IOWA
GRANT
RACINE
RACINE
RACINE
LAFAYETTE
GREEN
JANESVILLE
ROCK
WALWORTH
KENOSHA
KENOSHA
KENOSHA
1
2
3
4
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REFUSE COMBUSTION FOR POWER GENERATION
Wisconsin, 1971 - All Fossil Fuel Plants

	RATED CAPACITY MW	(b) ENERGY RQMT. 10^{12} $\frac{BTU}{yr}$	AREA POP. millions	(a) REFUSE GENERATION 10^6 $\frac{tons}{yr}$	(a) REFUSE GENERATION 10^{12} $\frac{BTU}{yr}$	POTENTIAL ENERGY SUPPLY FROM REFUSE (a/b %)	TYPICAL TRANS. DISTANCE miles
Appleton-Oshkosh SMSA (includes Manitowac and Sheboygan Counties)	575.2	24.4	0.463	0.30	2.73	11.2	45
Duluth-Superior SMSA	25.2	1.7	0.270	0.17	1.60	89.4	5
Green Bay SMSA	392.5	23.1	0.159	0.10	0.94	4.1	<5
La Crosse SMSA (includes Vernon, Trempeanleau and Buffalo Counties)	603.4	26.7	0.145	0.09	0.85	3.2	32
Madison SMSA (includes Columbia and Rock Counties)	554.9	30.7	0.473	0.31	2.79	9.1	25
Milwaukee SMSA	2725.4	113.0	1.429	0.93	8.45	7.5	9
Ashland County	82.2	4.8	0.017	0.01	0.09	1.9	<5
Grant County-Richland County	293.3	15.1	0.148	0.08	0.79	5.2	10
Marathon County-Wood County	176.5	8.2	0.165	0.09	0.88	10.7	5
WISCONSIN STATE TOTALS	5428.6	248.0	3.269	2.12	19.14	7.7	

REFUSE COMBUSTION FOR POWER GENERATION

Wisconsin, 1971 - Coal Plants Only*

AREA	RATED CAPACITY MW	(b) ENERGY RQMT. 10^{12} $\frac{BTU}{yr}$	AREA POP. millions	(a) REFUSE GENERATION 10^6 $\frac{tons}{yr}$	(a) REFUSE GENERATION 10^{12} $\frac{BTU}{yr}$	POTENTIAL ENERGY SUPPLY FROM REFUSE (a/b %)	TYPICAL TRANS. DISTANCE miles
Appleton-Oshkosh SMSA (includes Manitowac and Sheboygan Counties)	575.2	24.4	0.463	0.30	2.73	11.2	45
Duluth-Superior SMSA	25.2	1.7	0.270	0.17	1.60	89.4	5
Green Bay SMSA	392.5	23.1	0.159	0.10	0.94	4.1	< 5
La Crosse SMSA (includes Vernon, Trempeanleau and Buffalo Counties)	603.4	26.7	0.145	0.09	0.85	3.2	32
Madison SMSA (includes Columbia and Rock Counties)	554.9	30.7	0.473	0.31	2.79	9.1	25
Milwaukee SMSA	2380.3	101.6	1.429	0.93	8.45	8.3	10
Ashland County	82.2	4.8	0.017	0.01	0.09	1.9	< 5
Grant County-Richland County	293.3	15.1	0.148	0.08	0.79	5.2	10
Marathon County-Wood County	176.5	8.2	0.165	0.09	0.88	10.7	5
WISCONSIN STATE TOTALS	5083.5	237.3	3.269	2.12	19.14	8.1	

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*Includes all plants in the Data Tables except 20, 24.

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: WISCONSIN

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} BTU/yr	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANS. DISTANCE Miles
APPLETON-OSHKOSH SMSA													
4. Menasha													
Menasha Electric & Water Utility	29.2	44	1.52		100	-	-	*	*	*	1949	60	10
					des. s. coal								
10. Edgewater													
Wisconsin Power & Light													
Boiler 1	32			PCFR	100	-	-	Dry	E	95.6	1931	75	47
2	33			PCFR	100	-	-	Dry	E	95.5	1931	80	
3	81			CYCL	100	-	-	Wet	E	99.7	1951	200	
4	331			CYCL	100	-	-	Wet	E	99	1969	820	
	477	71	20.62		100 des.p.coal	-	-						
27. Manitowoc													
Manitowoc Public Utility	69	34	2.26		100	-	-	*	*	*		95	45
AREA TOTAL	575.2		24.40										
DULUTH-SUPERIOR SMSA													
5. Winslow													
Superior Water Light & Power	25.2	54	1.79		48	-	52	*	*	*		75	5
					des.p.coal/oil/gas								
AREA TOTAL	25.2		1.79										

* No FPC 67 filed

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: WISCONSIN

SMSA-COUNTY/PLANT	RATED CAPACITY	LOAD FACTOR	ENERGY RQMT.	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU %			BOTTOM ASH HANDLING	AIR POLLUTION CONTROL		INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY"	TYPICAL TRANS. DISTANCE
	MW	%	10^{12} $\frac{BTU}{yr}$		COAL	OIL	GAS		TYPE	EFF. %		tons/day	Miles
GREEN BAY SMSA													
13. Pulliam													
Wisconsin Public Service													
Boiler 1	10			PCFR				Wet	None	-	1927	20	<5
2	10			PCFR				Wet	None	-	1927	20	
3	30			PCFR				Wet	E	92	1943	70	
4	30			PCFR				Wet	E	89.9	1947	70	
5	50			PCFR				Wet	E	90	1949	120	
6	62.2			PCFR				Wet	E	87.9	1951	150	
7	75			PCFR				Wet	E	96.3	1958	185	
8	125			PCFR				Wet	E	92	1964	310	
	392.5	60	23.10		100	-	-						
					des.p.coal/oil/gas								
AREA TOTAL	392.5		23.10										
LA CROSSE SMSA													
1. French Island													
Northern States Power Co.													
Boiler 1	12.5			SPRE	100	-	-	Dry			1940	15	<5
2	12.5			SPRE	100	-	-	Dry	CYCL	86.5	1948	15	
	25.0	17	0.73		100	-	-						
					des.s-coal								
15. Alma													
Dairyland Power Coop.													
Boiler 1	17.3			PCFR	100	-	-	Dry	MCTA		1947	40	50
2	17.3			PCFR	100	-	-	Dry	MCTA		1947	40	
3	17.3			PCFR	100	-	-	Dry	MCTA		1950	40	
4	54.4			PCFR	100	-	-	Dry	MCTA		1957	140	
5	81.6			PCFR	100	-	-	Dry	MCTA	—	1959	210	
	187.9	67	11.54		100	-	-						
					des.p.coal								
18. New Genoa													
Dairyland Power Coop.													
Boiler 1	384			PCTA				Dry	E	88	1969	690	19
	384	55	14.50		99	1	-						
					des.p.coal								
19. Edison													
Northern States Power Co.	6.5	.005	0.003		100	-	-	*	*	*			10
					des.s.coal								
AREA TOTAL	603.4		26.77										

* No FPC 67 filed

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: WISCONSIN

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. $10^{12}\frac{BTU}{yr}$	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANS. DISTANCE Miles
MADISON SMSA													
3. Blount Street Madison Gas & Electric Co.													
Boiler 1	5			RFRO/ GFRO				None	None	-	1968	10	<5
2	5			RFRO/ GFRO				None	None	-	1968	10	
3	21			RFRO/ GFRO				None	None	-	1968	50	
11	7.5			RFRO/ GFRO				None	None	-	1964	15	
5	21			PCFR				Wet	CYCL	85	1938	50	
6	21			PCFR/ GFRO				Wet	CYCL	85	1943	50	
7	27			PCFR/ GFRO				Dry	CYCL	85	1949	60	
8	44			PCFR/ GFRO				Dry	CYCL	85	1957	105	
9	44			PCFR/ GFRO				Dry	CYCL	85	1961	105	
	195.5	54	11.14		31 des.s.coal/gas	-	69						
11. Rock River (Rock Co.) Wisconsin Power & Light													
Boiler 1	79.7			CYCL	100	-	-	Wet	E	99.6	1954	190	31
2	79.7			CYCL	100	-	-	Wet	E	99.6	1955	190	
	159.4	61	8.49		100 des.p.coal	-	-						

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: WISCONSIN

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} $\frac{BTU}{yr}$	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANS. DISTANCE Miles
MADISON SMSA - cont'd													
9. Black Hawk (Rock Co.) Wisconsin Power & Light													
Boiler 3	25			PCFR				Dry	SCTA	80	1947	55	40
4	25			PCFR/ GFRO				Dry	SCTA	80	1949	55	
	50	50	2.73		6 des.p.coal/gas	-	94						
26. Rock River Wisconsin Power & Light													
Boiler 1	150			CYCL	100	-	-	Wet	None	-	1954		40
2				CYCL	100	-	-	Wet	None	-	1955		
	150	61	8.35		100 des.p.coal	-	-					350	
AREA TOTAL	554.9		30.71										
MILWAUKEE SMSA													
6. North Oak Creek Wisconsin Electric Power Co.													
Boiler 1	120			*	100	-	-	Dry	E	90	1953	190	10
2	120				100	-	-	Dry	E	90	1954	190	
3	130				100	-	-	Dry	E	93	1955	205	
4	130				100	-	-	Dry	E	92	1957	205	
	500	42	18.97		100 des.p.coal	-	-						

* Front Wall Vertical Downward

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: WISCONSIN

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} $\frac{BTU}{yr}$	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANS. DISTANCE Miles
MILWAUKEE SMSA - cont'd													
7. South Oak Creek Wisconsin Electric Power Co.													
Boiler 5	280.3							Dry	E	45	1959	530	6
6	280.3			*				Dry	E	50	1961	530	
7	316.0							Dry	E	92	1965	600	
8	316.0							Dry	E	92	1967	600	
	1192.6	54	53.18		99 des.p.coal	1	-						
25. Valley Wisconsin Electric Power Co.													
Boiler 1	68			PCFR				Dry	E	96	1968	140	<5
2	68			PCFR				Dry	E	96	1968	140	
3	68			PCFR				Dry	E	97	1969	140	
4	68			PCFR				Dry	E	97	1969	140	
	272	47	13.17		99 des.p.coal/gas	-	1						

* Front Wall Vertical Downward

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE:WISCONSIN

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} $\frac{BTU}{yr}$	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANS. DISTANCE miles
Milwaukee SMSA cont'd													
8. Port Washington Wisconsin Electric Power Co.													
Boiler 1	80			**	100	-	-	Dry	E	98.8	1935	135	25
2	80			**	100	-	-	Dry	E	99.1	1943	135	
3	80			**	100	-	-	Dry	E	99.2	1948	135	
4	80			**	100	-	-	Dry	E	99.1	1949	135	
5	80			**	100	-	-	Dry	E	99.0	1950	135	
	400	39	16.03		100 des. p. coal	-	-						
20. Commerce Street Wisconsin Electric Power Co.													
Boiler 1	35	50	2.28	-	- des.oil/gas	6	94	None	None	-		70	<5
21. East Wells Street Wisconsin Electric Power Company	15	21	0.31	*	100 des s & p coal	-	-	*	*	*		10	<5

* No FPC-67 filed

** Front wall fired vertical downward

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: WISCONSIN

SMSA-COUNTY/PLANT	RATED CAPACITY MW	LOAD FACTOR %	ENERGY RQMT. 10^{12} BTU/yr	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU % COAL	OIL	GAS	BOTTOM ASH HANDLING	AIR POLLUTION CONTROL TYPE	EFF. %	INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY" tons/day	TYPICAL TRANS. DISTANCE Miles
MILWAUKEE SMSA - cont'd													
24. Lakeside Wisconsin Electric Power Co.													
Boiler 1	*			GOPP/ROPP				None	None	-	1920		5
2				GOPP/ROPP				None	None	-	1920		
3				GOPP/ROPP				None	None	-	1920		
4				GOPP/ROPP				None	None	-	1920		
5				GOPP/ROPP				None	None	-	1921		
6				GOPP/ROPP				None	None	-	1921		
7				GOPP/ROPP				None	None	-	1921		
8				GOPP/ROPP				None	None	-	1921		
9				GOPP/ROPP				None	None	-	1923		
10				GOPP/ROPP				None	None	-	1923		
11				GOPP/ROPP				None	None	-	1923		
12				GOPP/ROPP				None	None	-	1923		
13				GOPP/ROPP				None	None	-	1924		
14				GOPP/ROPP				None	None	-	1924		
15				GOPP/ROPP				None	None	-	1924		
16				GOPP/ROPP				None	None	-	1924		
17				GFRO/RFRO				None	None	-	1926		
18				GFRO/RFRO				None	None	-	1929		
19				GFRO/RFRO				None	None	-	1930		
20				GFRO/RFRO				None	None	-	1930		
	310.8	21	9.08		- des. oil/gas	31	91					380	
AREA TOTAL	2725.4		113.02										

* complete plant header system

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: WISCONSIN

SMSA-COUNTY/PLANT	RATED CAPACITY	LOAD FACTOR	ENERGY RQMT.	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU %			BOTTOM ASH HANDLING	AIR POLLUTION CONTROL		INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY"	TYPICAL TRANS. DISTANCE
	MW	%	10^{12} $\frac{BTU}{yr}$		COAL	OIL	GAS		TYPE	EFF. %		tons/day	Miles
MARATHON COUNTY-WOOD COUNTY													
14. Weston Weston Public Service													
Boiler 1	60			PCFR				Wet	E	99.6	1954	150	5
2	75			PCFR/GFRO				Wet	E	99.2	1960	185	
	135.0	61	7.99		61 des.p.coal/gas	-	39						
28. Wildwood Marshfield Electric & Water Dept.	41.5	37	0.24	*	100	-	-	*	*	*		60	15
AREA TOTAL	176.5		8.23										Appleton 85

* No FPC 67 filed

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: WISCONSIN

SMSA-COUNTY/PLANT	RATED CAPACITY	LOAD FACTOR	ENERGY RQMT.	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU %			BOTTOM ASH HANDLING	AIR POLLUTION CONTROL		INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY"	TYPICAL TRANS. DISTANCE
	MW	%	10^{12} $\frac{BTU}{yr}$		COAL	OIL	GAS		TYPE	EFF. %		tons/day	miles
Ashland County													
2. Bay Front Lake Superior District Power Company	82.2	49	4.83	*	59	-	41	*	*	*	1917	205	<5
					des s. coal/gas								
AREA TOTAL	82.2		4.83										
													Duluth 60
Grant County-Richland County													
12. Nelson Dewey Wisconsin Power and Light													
Boiler 1	119.4			CYCL	100	-	-	Wet	None	-	1960	280	10
2	116.6			CYCL	100	-	-	Wet	None	-	1962	270	
	227.2	65	12.48		100	-	-						
					des p. coal								
16. Stoneman Dairyland Power Corp.													
Boiler 1	17.3				100	-	-		C			30	10
2	34.5				100	-	-		C			65	
	51.8	45	2.44		100	-	-						
					des. p. coal								

*No FPC-67 filed.

REFUSE COMBUSTION FOR POWER GENERATION

YEAR: 1971
STATE: Wisconsin

SMSA-COUNTY/PLANT	RATED CAPACITY	LOAD FACTOR	ENERGY RQMT.	TYPE OF FIRING	CURRENT FUEL DISTRIBUTION BY BTU %			BOTTOM ASH HANDLING	AIR POLLUTION CONTROL		INITIAL YEAR OF OPERATION	REFUSE COMBUSTION "CAPACITY"	TYPICAL TRANS. DISTANCE
	MW	%	10^{12} $\frac{BTU}{yr}$		COAL	OIL	GAS		TYPE	EFF. %		tons/day	miles
Grant County - Richland County cont'd													
29. Richland Center Richland Center Municipal Utility	14.3	18	0.24	*	100 des s. coal	-	-	*	*	*		10	<5
AREA TOTAL	293.3		15.15										LaCrosse 65

* No FPC-67 filed

DATA FOR 1975

Note: Calculations of energy requirements in the 1975 tables are based on 1971 average load factors and heat rates.

SUMMARY OF RESULTS
REFUSE COMBUSTION FOR POWER GENERATION
ALL FOSSIL FUEL PLANTS 1975

	RATED CAPACITY MW	(b) ENERGY RQMT. $10^{12}\ \frac{\text{BTU}}{\text{yr}}$	AREA POP. Millions	(a) REFUSE GENERATION $10^{6}\ \frac{\text{tons}}{\text{yr}}$	$10^{12}\ \frac{\text{BTU}}{\text{yr}}$	POTENTIAL ENERGY SUPPLY FROM REFUSE (a/b%)	
ALABAMA	9560.3	458.2	1.82	1.29	11.66	2.5	
CALIFORNIA	22509.6	919.6	16.82	11.97	107.75	11.7	
CONNECTICUT	3881.3	210.7	2.63	1.87	16.89	8.0	
DELAWARE (Wilmington)	827.5	53.5	0.55	0.39	3.53	6.6	
FLORIDA	17134.65	738.1	6.09	4.32	38.91	5.3	
GEORGIA	10068.0	516.8	2.37	1.66	15.01	2.9	
ILLINOIS	16428.3	887.8	9.43	6.68	60.12	6.8	
INDIANA	12239.7	630.6	3.76	2.64	23.78	3.8	
KANSAS (Kansas City)	2395.8	91.3	1.38	0.98	8.84	9.7	(also included in Mo. total)
KENTUCKY	11653.2	581.3	1.48	1.03	9.35	1.6	
MAINE(Portland)	213.6	14.5	0.21	0.14	1.34	9.2	
MARYLAND	7216.3	481.0	5.68	4.04	36.42	7.6	
MASSACHUSETTS	7157.7	385.2	6.29	4.47	40.29	10.5	
MICHIGAN	13372.0	757.3	6.89	4.87	43.90	5.8	
MINNESOTA (Mpls.-St.Paul)	2048.8	106.8	1.99	1.42	12.80	12.0	
MISSOURI	11873.7	547.7	4.62	3.29	29.61	5.4	
NEBRASKA (Omaha)	794.2	39.2	0.58	0.41	3.70	9.4	
NEW HAMPSHIRE (Manchester)	638.0	36.3	0.40	0.28	2.57	7.1	
NEW JERSEY	6297.8	319.1	4.84	3.46	31.15	9.8	
NEW YORK	19434.2	921.4	17.33	12.34	111.08	12.1	
NORTH CAROLINA	11462.0	703.0	1.69	1.16	10.47	1.5	
OHIO	28364.4	1399.9	9.89	6.95	62.58	4.5	
PENNSYLVANIA	22681.3	1152.9	11.11	7.88	70.97	6.2	
RHODE ISLAND (Providence-Pawtucket, Warwick)	145.9	10.6	0.82	0.58	5.27	49.5	
TENNESSEE	10043.7	459.4	2.22	1.57	14.15	3.1	
VIRGINIA	5019.3	261.8	1.85	1.31	11.80	4.5	
WEST VIRGINIA	10583.3	599.3	0.54	0.36	3.29	0.5	
WISCONSIN	5955.6	272.8	3.47	2.45	22.08	8.1	
TOTALS	267604.35	13557.3	126.75	89.92	809.30	6.0	

SUMMARY OF RESULTS
REFUSE COMBUSTION FOR POWER GENERATION
COAL-BURNING PLANTS ONLY 1975

	RATED CAPACITY MW	(b) ENERGY RQMT. $10^{12}\ \frac{BTU}{yr}$	AREA POP. Millions	(a) REFUSE GENERATION $10^{6}\ \frac{tons}{yr}$	(a) REFUSE GENERATION $10^{12}\ \frac{BTU}{yr}$	POTENTIAL ENERGY SUPPLY FROM REFUSE (a/b%)	
ALABAMA	9560.3	458.2	1.82	1.29	11.66	2.5	
CALIFORNIA	-	-	16.82	11.97	107.75	-	
CONNECTICUT	3002.0	164.5	2.63	1.87	16.89	10.3	
DELAWARE (Wilmington)	827.5	53.5	0.55	0.39	3.53	6.6	
FLORIDA	5449.7	187.0	6.09	4.32	38.91	20.8	
GEORGIA	9662.0	497.4	2.37	1.66	15.01	3.0	
ILLINOIS	16228.3	877.0	9.43	6.68	60.12	6.9	
INDIANA	12239.7	630.6	3.76	2.64	23.78	3.8	
KANSAS (Kansas City)	2262.8	89.3	1.38	0.98	8.84	9.9	(also included in Mo. total)
KENTUCKY	11653.2	581.3	1.48	1.03	9.35	1.6	
MAINE(Portland)	-	-	0.21	0.14	1.34	-	
MARYLAND	5541.3	369.4	5.68	4.04	36.42	9.9	
MASSACHUSETTS	3533.3	188.2	6.29	4.47	40.29	21.4	
MICHIGAN	11875.5	676.0	6.89	4.87	43.90	6.5	
MINNESOTA (Mpls.-St.Paul)	2018.8	106.1	1.99	1.42	12.80	12.1	
MISSOURI	11366.5	532.6	4.62	3.29	29.61	5.6	
NEBRASKA (Omaha)	774.2	38.9	0.58	0.41	3.70	9.5	
NEW HAMPSHIRE (Manchester)	638.0	36.3	0.40	0.28	2.57	7.1	
NEW JERSEY	5194.9	263.8	4.84	3.46	31.15	11.8	
NEW YORK	10134.5	503.9	17.33	12.34	111.08	22.0	
NORTH CAROLINA	11462.0	703.0	1.69	1.16	10.47	1.5	
OHIO	28145.1	1263.6	9.89	6.95	62.58	5.0	
PENNSYLVANIA	21555.9	1093.7	11.11	7.88	70.97	6.5	
RHODE ISLAND (Providence-Pawtucket, Warwick)	145.9	10.6	0.82	0.58	5.27	49.5	
TENNESSEE	10043.7	459.4	2.22	1.57	14.15	3.1	
VIRGINIA	4174.3	217.7	1.85	1.31	11.80	5.4	
WEST VIRGINIA	10583.3	599.3	0.54	0.36	3.29	0.5	
WISCONSIN	5609.8	262.6	3.47	2.45	22.08	8.4	
TOTALS:	211419.7	10775.6	125.37	88.93	800.45	7.4	

PROBABLE NEW PLANTS - 1972 TO 1975
(Excluding Nuclear)

	Generating Cap. MW	Fuel Type	Year
ALABAMA			
6. Gaston 5 (Alabama Power Co.)	910	p. coal	1974
11. Gorgas 10 (Alabama Power Co.)	788.8	p. coal	1972
TOTAL	1698.8	p. coal	
CALIFORNIA			
15. Scattergood 3 (L.A. Dept. of Water & Power)	309	gas	1974
22. Huntington Beach 6 (So. Cal. Edison)	750	oil/gas	--
22. Huntington Beach 7 (So. Cal. Edison)	790	oil/gas	--
16. Encina 4 (San Diego Gas & Electric)	287	oil/gas	1973
16. Encina 5 (San Diego Gas & Electric)	297	oil/gas	1975
26. Ormond Beach 2 (So. Cal. Edison)	750	oil/gas	1973
TOTAL	3183	oil & gas	
CONNECTICUT			
4. Middleton 4 (Hartford Electric Light Co.)	400	oil	1973
9. Cokeworks 1 (United Illuminating Co.)	445	oil	1975
TOTAL	845	oil	
FLORIDA			
43. Port Manatee 1 (Florida Power & Light)	850	oil	1975
14. Sanford 4 (Florida Power & Light)	383	oil	1972
14. Sanford 5 (Florida Power & Light)	420	oil	1973
30. Anclota 1 (Florida Power Corp.)	510	oil	1974
30. Anclota 2 (Florida Power Corp.)	510	oil	1975
32. Ft. Pierce-King 8 (Ft. Pierce Munic.)	58	oil/gas	1974
31. Municipal 4 (Vero Beach Municipal)	62	oil/gas	1975
25. Northside 2 (Jacksonville Municipal)	297	oil	1972
33. Indian River 3 (Orlando Util. Comm.)	345	oil/gas	1973
34. Big Bend 2 (Tampa Electric)	425	coal	1973
34. Big Bend 3 (Tampa Electric)	446	coal	1975
17. Crist 7 (Gulf Power Company)	505	coal/oil	1973
TOTAL	1376	coal plants	
	3435	oil & gas	
	4811		

		Generating Cap.	Fuel Type	Year
GEORGIA				
9.	Port Wentworth 4 (Savannah Electric & Power Company)	120	oil/gas	1972
10.	Bowen 2 (Georgia Power Company)	806	coal	1972
10.	Bowen 3 (Georgia Power Company)	880	coal	1974
10.	Bowen 4 (Georgia Power Company)	880	coal	1975
11.	Yates 6 (Georgia Power Company)	350	coal	1974
11.	Yates 7 (Georgia Power Company)	350	coal	1974
13.	Effingham (Savannah Electric & Power Company)	175	oil	1975
	TOTAL	3266	coal plants	
		295	oil & gas	
		3561		
ILLINOIS				
6.	Meredosia (Central Ill. Public Serv.)	200	oil	1975
11.	Powerton 5 (Commonwealth Edison)	840	coal	1972
11.	Powerton 6 (Commonwealth Edison)	840	coal	1975
29.	Baldwin 2 (Illinois Power Company)	600	coal	1973
29.	Baldwin 3 (Illinois Power Company)	600	coal	1975
18.	Dallman 2 (Springfield Water, Light & Power Dept.)	80	coal	1972
1.	Edwards 3 (Central Illinois P.C.)	350	coal	1972
3.	Coffeen 2 (Central Illinois P.S.C.)	600	p. coal	1972
	TOTAL	3910	coal plants	
		200	oil	
		4110		
INDIANA				
19.	Lawton Park (Bd. of Public Works, Fort Wayne)	20	coal	--
9.	Stout 7 (Indianapolis Power & Light)	450	coal	1973
20.	Kankakee 14 (No. Ind. Public Service)	520	coal	1975
13.	Michigan City 12, No. 5 (No. Ind. Public Service)	520	coal	1973
21.	Gibson 1 (Public Service of Indiana)	650	coal	1975
14.	Cayuga 2 (Public Service of Indiana)	500	p. coal	1973
22.	Culley 3 (So. Ind. Gas & Electric)	250	coal	1973
10.	Whietwater Valley (Richmond Municipal Lighting & Power)	60	coal	1973
	TOTAL	2970	coal plants	

		Generating Cap.	Fuel Type	Year
KENTUCKY				
11.	Coleman 3 (Big River Rural Elec. Coop)	170	p. coal	1972
13.	Ghent 1 (Ky. Utility Company)	511	coal	1973
14.	Millcreek 1 (Louisville Gas & Elec.)	355	coal	1972
14.	Millcreek 2 (Louisville Gas & Elec.)	330	coal	1974
15.	Elmer Smith 2 (Owensboro Municipal)	265	coal	1973
16.	Station 2 No.1 (Henderson)	185	coal	1973
	No.2 (Henderson)	185	coal	1973
	TOTAL	2001	coal plants	
MARYLAND				
4.	Wagner 4 (Baltimore Gas & Elec. Co.)	415	oil	1972
13.	Chalk Point 3 (Potomac Elec. Power)	630	oil	1974
13.	Chalk Point 4 (Potomac Elec. Power)	630	oil	1975
	TOTAL	1675	oil	
MASSACHUSETTS				
12.	Salem Harbor 4 (New Eng. Power Co.)	437	oil	1972
2.	Mystic 7 (Boston Edison)	600	oil	1975
5.	Canal 2 (Canal Electric Company)	560	oil	1975
11.	Brayton Point 4 (New Eng. Elec. Power Company)	465	oil	1975
13.	Cleary 2 (Taunton Municipal)	90	oil	1973
	TOTAL	2152	oil	
MICHIGAN				
2.	Karn 3 (Consumer Power Company)	660	oil	1974
2.	Karn 4 (Consumer Power Company)	660	oil	1975
18.	Monroe 2 (Detroit Edison)	800	coal	1973
18.	Monroe 3 (Detroit Edison)	800	coal	1973
18.	Monroe 4 (Detroit Edison	800	coal	1974
21.	Erickson 1 (Lansing Bd. of Water & Light)	160	coal	1972
14.	Presque Isle 5 (Upper Peninsula Generating Co.)	85	coal	1974
14.	Presque Isle 6 (Upper Peninsula Generating Co.)	85	coal	1974
	TOTAL	2730	coal plants	
		1320	oil	
		4050		

		Generating Cap.	Fuel Type	Year
MISSOURI				
15.	Labadie 3 (Union Electric Company)	580	coal	1972
15.	Labadie 4 (Union Electric Company)	600	p. coal	1973
10.	Rush Island 1 (Union Electric Co.)	600	coal	1975
16.	New Madrid (Assoc. Elec. Coop)	600	coal	1972
	TOTAL	2380	coal plants	
NEW JERSEY				
16.	Linden 4 (Public Service Elec. & Gas Company)	93.5	oil	1972
1.	England 3 (Atlantic City Elec.)	160	oil	1974
13.	Gilbert Street 4, 5, 6 (Gen. Public Util.)	330	oil/gas	1974
	TOTAL	583.5	oil & gas	
NEW YORK				
14.	Northport 3 (Long Island Lighting)	387	oil	1972
24.	Bowline 1 (Orange & Rockland Util.)	621	oil/gas	1972
24.	Bowline 2 (Orange & Rockland Util.)	600	oil	1974
32.	Roseton 1 (Central Hudson Gas & Elec. Corp.)	600	oil	1972
32.	Roseton 2 (Central Hudson Gas & Elec. Corp.)	600	oil	1973
5.	Astoria 6 (Con Edison)	800	oil/gas	1974
23.	Oswego 5 (Niag. Mohawk)	850	oil	1974
	TOTAL	4458	oil & gas	
NORTH CAROLINA				
5.	Sutton 3 (Carolina Power & Light)	420	p. coal/oil	1972
9.	Clif side 5 (Duke Power Company)	570	p. coal	1972
4.	Roxboro 3 (Carolina Power & Light)	720	coal	1973
12.	Belews Creek 1 (Duke Power Company)	1144	coal	1974
12.	Belews Creek 2 (Duke Power Company)	1144	coal	1975
	TOTAL	3998	coal plants	

		Generating Cap.	Fuel Type	Year
OHIO				
5.	Eastlake 5 (Cleveland Elec. Illum. Co.)	680	p. coal	1972
24.	Conesville 4 (Columbus & So. Ohio)	800	coal	1973
26.	Gen. Gavin 1 (Ohio Power Company)	1300	coal	1974
26.	Gen. Gavin 2 (Ohio Power Company)	1300	coal	1975
45.	Painesville (Painesville Municipal)	25	oil/coal	1974
27.	Shelby 6 (Shelby Municipal)	12.5	coal	1973
28.	Miami Fort 7 (Cincinnati Gas & Elec. Company)	550	coal	1975
25.	Stuart 3 (Columbus & So. Ohio Elec. Company)	610	p. coal	1972
25.	Stuart 4 (Columbus & So. Ohio Elec. Company)	610	p. coal	1974
	Stuart 5 (Dayton Power & Light)	580	coal	1974
	TOTAL	6467.5	coal plants	
PENNSYLVANIA				
14.	Martins Creek 3 (Penn. Power & Light)	800	oil	1975
35.	Montour 1 (Penn. Power & Light)	790	coal	1972
35.	Montour 2 (Penn. Power & Light)	750	coal	1973
23.	Eddystone 3 (Philadelphia Elec. Co.)	400	coal	1974
23.	Eddystone 4 (Philadelphia Elec. Co.)	400	coal	1975
29.	Mansfield 1 (Ohio Edison)	880	coal	1975
	TOTAL	3220	coal plants	
		800	oil	
		4020		
TENNESSEE				
7.	Cumberland 1 (TVA)	1300	coal	1972
7.	Cumberland 2 (TVA)	1300	coal	1973
	TOTAL	2600	coal plants	
VIRGINIA				
5.	Yorktown 3 (Va. Elec. & Power Co.)	845	oil	1974
	TOTAL	845	oil	

		Generating Cap.	Fuel Type	Year
WEST VIRGINIA				
7.	Amos 2 (Ohio Power Company)	816.3	coal	1972
7.	Amos 3 (Ohio Power Company)	1632.6	coal	1973
9.	Harrison 1 (Monongalia Power Co.)	684	coal	1972
9.	Harrison 2 (Monongalia Power Co.)	650	coal	1973
9.	Harrison 3 (Monongalia Power Co.)	650	coal	1975
10.	Mt. Storm 3 (Va. Electric & Power Co.)	555	coal	1973
	TOTAL	4987.9	coal plants	
WISCONSIN				
17.	Columbia 1 (Wisc. Power & Light)	527	coal	1975
	TOTAL	527	coal plants	

APPENDIX I

ASPECT OF WASTE COMBUSTION OUTSIDE THE SCOPE OF THIS STUDY

The following factors will have the most significant impact on a utility's decision on whether to burn waste as a supplementary fuel. While the data presented in this report are intended to assist in selecting potentially promising situations, a detailed evaluation of these factors is outside the scope of this study:

1. Capital Investments

    Cost of modifying the boiler itself

    Cost of ancillary equipment for receiving refuse, handling, shredding, metal removal, etc.

    Cost of additional air pollution control equipment

2. Operating Costs

    Cost of waste gathering and transportation

    Cost of shredding and other waste processing operations

    Cost of transfer of fuel to firing point

    Cost of disposal of noncombustible material

    Cost of incremental ash disposal

3. Feasibility of Boiler Modification

    Apart from the cost itself, there may be physical problems associated with the modification of any particular boiler (age of equipment, for example).

4. Technical Reliability

    All utilities are concerned with keeping their power generating equipment in operating condition. Corrosion of boiler tubes, for example, can be caused by burning any fuel and can require that equipment be taken out of service so that repairs can be made. All utilities are concerned about corrosion. Some utilities are apprehensive to the extent that they do not want to expose their boiler to the possible additional risk attributed to burning solid waste. Other utilities are not apprehensive about the corrosion potential of burning solid waste.

5. Load Factor of Boiler

Modifying a peakload unit would mean that fuel storage and firing equipment would have to be large, capable of disposing of the daily solid waste load in a short time. This would involve a higher capital cost for fuel storage and firing than the modification of a baseload boiler, in which the solid waste could be burned over a longer period of time.

6. Introduction of Nuclear Plants

The introduction of nuclear generating capacity in a system will cause the fossil fuel plants to be cut back somewhat; i.e., their load factor will fall. This then has the same effect as described in item 5 above.

7. Fuel Rider and Electricity Rate Structure

The utility company may have to pass any fuel savings through to the customer if solid waste were to be a significantly cheaper fuel. There would therefore be no direct economic incentive to pursue the concept of using waste as supplementary fuel.

8. Marketability of Fly Ash After Introduction of Solid Waste Fuel

9. Ash Disposal Site

While benefits will be gained from the reduction in landfill disposal requirements for the raw garbage, there must be available means to dispose of the ash generated from the waste-derived fuel.

10. Public Relations

Because a utility is concerned with public approval of rate increases and new plant sites and is aware of its public service role, it may consider solid waste as a fuel in order to achieve a favorable image with the public as a good corporate citizen.

12. Air Pollution

Air emission tests have been conducted at only one location: the Union Electric Company's Meramec Plant, where solid waste is burned with coal as part of EPA's energy recovery demonstration grant to the City of St. Louis.

Based on those tests, conducted in late 1973, it appears that:

1. Particulate emissions increase slightly when solid waste is fired with coal, probably because of decreases in the efficiency of the electrostatic precipitation (ESP). There was no discernable change in particulate particle size or resistivity. Decrease in ESP performance may result from increases in gas velocity and changes in ESP electrical conditions (spark rate).
2. Gaseous emissions (sulfur oxides, nitrogen oxides, hydrogen chloride, and mercury vapor) are not significantly affected by combined firing of waste and coal.
3. Uncontrolled particulate emissions per cubic foot of exhaust gas are not changed by combined firing; however, total uncontrolled particulate emission do increase because of increases in the gas flowrate.
4. Additional air pollution testing is required to complete the characterization of particulate emissions resulting from combined firing.

Additional tests were conducted late in 1974. The test results will be available in the Spring, 1975. If preliminary indications of increased particulate emissions are confirmed, an increase in the capacity of the pollution control devices will be required.

APPENDIX II

DETAILS OF HOW THE WORK WAS DONE

The work performed for this study may be divided into a number of discrete parts:

A. Plant Locations and Capacities

Information for plants existing in 1971 was obtained from National Coal Association and Federal Power Commission (FPC) publications.[1,2] For projected plants, two surveys were consulted.[3,4]

For data on individual boilers, FPC form 67 or the annual summaries derived from the form were used.[5] The 1969 survey as reported in the original form 67's, filed by the utility companies with the FPC in Washington, D.C., was used most frequently.

In some cases, the individual boiler capacities from form 67 did not add to give the total plant capacity as quoted in the other references. Where the discrepancy represented less than 5 percent of the plant capacity, the boiler figures were prorated to the total plant figure; these changes are noted in the detailed data tables.

B. Energy Requirements

Load factors, net electricity generation (KWH), and plant heat rates (Btu per KWH) for 1971 were obtained from FPC data.[2] Data is given on a plant basis and no breakdown was obtained for individual boilers. In some cases, plant heat rates were not reported; statewide averages were used in such cases. In some plants, new units were started up in 1971, giving rise to unrealistically low load factors for that year. Again, statewide average factors were used to compute a more representative plant energy requirement with which to relate refuse combustion energy. Use of State averages is noted in the detailed data tables.

For the 1975 calculations of energy requirements, the 1971 average load factors and heat rates were used for each State in the absence of other information.

C. Fuel Distribution

The distribution of fuels within plants for 1971, by Btu supplied, was obtained on a percentage basis from National Coal Association data.[1] The same source was used to establish the plant design fuels.

D. Equipment Details

Boiler-by-boiler data on type of firing, bottom and fly ash handling equipment and operability was obtained from the relevant FPC form 67. Figures for the efficiency of air pollution control equipment refer to performance when burning coal during average operating conditions unless marked (t), for test conditions, or (d), for design calculations. "NR" indicates data was not reported in FPC 67 nor supplied by the utilities themselves.

A key to abbreviations is given in the section "Presentation of Results" and a number of terms are defined in the glossary, Appendix III.

E. Data Confirmation by Utility Companies

Sections A, B, C, and D above explain how most of the boiler data was gathered. When data had been assembled in a consistent format, all the utility companies were contacted for verification. According to the Edison Electric Institute who assisted in the confirmation, no changes have been requested by the companies to date. Any changes subsequently notified will be published as an addendum.

F. Waste Generation Areas

For the States under study, all the power plants were marked on maps showing SMSA's and counties. Each State was then split into "waste generation areas" according to the distribution of plants, with the emphasis on matching plants to the most populated areas, as represented by SMSA's. In some cases, counties adjacent to SMSA's were included in the "areas"; in other cases, plants outside SMSA's were matched to the county in which they were situated.

The boundaries of the "waste generation areas," within which solid waste is assumed most likely to be transported to the power plants, were thus drawn without formal investigation to define possible transportation methods and routes to those plants, nor was consideration given in this study to the optimum economic distance from the plants.

The maps presented with the study results indicate plant locations and the "waste generation areas" for which population data was developed.

G. Population Estimates

The basic data for most of the population figures was obtained from a report by EPA and HUD, Population and Economic Activity in the U.S. and Standard Metropolitan Statistical Areas,[6] were those for 1970 (actual) and as predicted for 1975 based on a fertility rate C. It was decided to amend the predictions to the lower rate E (12 percent lower than C in the year 2000) by multiplying the prediction figures for 1975 by 0.997, a number obtained by interpolating data in the above report comparing growth rates based on C and E.

Having assembled population figures for each SMSA for 1970 and 1975, the figures for 1971 were obtained by linear interpolation between 1970 and 1975.

Since a number of the waste generation calculations require inclusion of counties outside the SMSA's, county population figures from the 1970 Census were obtained.[7] Estimates for 1971 and 1975 were made by using the growth rates for adjacent SMSA's which were deduced from the figures already calculated.

H. Waste Generation and Energy Content

The following figures were used to calculate the quantity of raw refuse generated in each year and the corresponding potential energy obtainable by combustion:[8]

Waste Generation (lb/person/day)	1971	1975
SMSA's/urbanized areas	3.60	3.91
Counties (assumed same as national average)	3.25	3.53
Solid waste heating value, Btu/lb	4,500	4,500

I. Typical Transportation Distances

For each "waste generation area," the center of population was estimated on the maps. This point was deemed the center of waste generation. Distances from there to each plant in the area were determined and are recorded as typical transportation distances in the plant data tabulations. Where more than one plant was located in an area, a weighted average of the distances was used as the typical transportation distance for the area, and these distances were recorded in the State summary tables. The averages were weighted according to the plant energy requirements, on the assumption that solid waste would be distributed to the plants according to their fuel demand. In practice this may not take place since all waste may be sent to one particular plant for processing. The distances reported in this study are therefore intended only as a general guide.

For many plants, distances from major urban centers outside the immediate area are also quoted for informational purposes since it may prove desirable to arrange rail or barge transportation from the most populated areas to certain distant plants which are particularly suitable for utilizing solid waste combustion.

J. Boiler Capacity for Solid Waste Combustion

It is probable that at least 10 percent of the fuel used by any boiler could in principal be replaced by solid waste, provided the necessary ash-handling equipment were available and operable. A column is included in the data tables which presents the energy requirement of each boiler in terms of the equivalent tonnage of waste, assuming (1) 10 percent replacement of fuel by solid waste and (2) the average plant heat rate and load factor apply to each boiler in the plant.

These figures were calculated using the nomograph described earlier in this report. It was decided to perform the calculations for all boilers, with or without the necessary ash-handling equipment, to indicate the potential waste-burning capacity of those boilers that might be converted to handle refuse if economic conditions were favorable. The quantities calculated were rounded to the nearest 5 tons per day.

APPENDIX III

DEVELOPMENT OF THE NOMOGRAPH

The nomograph is based on the following steps:

A. Define MW as unit (plant or boiler) capacity, in megawatts

PC as the unit load factor, in percent

H as the unit heat rate, in Btu/KWH

B. The unit daily energy requirement is $(1{,}000 \cdot \text{MW} \cdot \frac{\text{PC}}{100} \cdot \text{H} \cdot 24)$ Btu/day

C. Assume the refuse-burning capability of the unit is 10 percent of the total fuel being fired. The energy to be supplied by refuse is thus $(24 \cdot \text{MW} \cdot \text{PC} \cdot \text{H})$ Btu/day.

D. Assuming a heating value for refuse of 4,500 Btu/lb, the energy is equivalent to

$$\frac{24 \cdot \text{MW} \cdot \text{PC} \cdot \text{H}}{4{,}500 \cdot 2{,}000} \text{ tons of refuse per day}$$

E. The above quantity is essentially a "year-round" daily figure, provided the average load factor for a long period of time is used. The equivalent quantity of refuse (R) to be transported to a plant or boiler on a "5 working days per week" basis is therefore found:

$$R = \frac{24 \cdot \text{MW} \cdot \text{PC} \cdot \text{H}}{4{,}500 \cdot 2{,}000} \cdot \frac{7}{5} = (3.733 \times 10^{-6})\ \text{MW} \cdot \text{PC} \cdot \text{H}$$

Tons of refuse/working day

APPENDIX IV

GLOSSARY

Air Classifier -- a device which uses a jet of air to separate light particles, such as shredded paper and plastics, from heavy particles, such as pieces of metal and glass. Shredded waste is dropped vertically down into a chute, as a jet of air is blown up from the bottom of the chute. Heavy materials drop down while the air catches the light materials and carries them out of the top of the chute.

Baffle -- a simple air pollution control device which is used to change direction of a dust-laden gas, causing the coarser particles to impinge on a wall and drop out of suspension. Primarily used to reduce dust loading ahead of more efficient dust collection devices.

Baghouse (fabric collector) -- a simple air pollution control device utilizing the principle of filtration. Dust-laden gas is passed through fabric bags or envelopes which remove a large percentage of the dust.

Baseload boiler -- a boiler that operates all the time (except for downtime for maintenance), including evenings and winter months. Baseload boilers are generally the most efficient boilers and are less costly to operate than peakload boilers. (See Peakload boilers)

Boiler -- equipment in which fuel is burned and the heat released by combustion is used to raise steam. The steam is subsequently used to power turbines driving electrical generators. A power plant may have one or several boilers: each boiler may be used to raise steam for specific generating equipment or several boilers may be tied into a common steam header.

Bottom ash -- ash that drops to the bottom of a boiler and consists of heavy noncombustible particles.

"Wet systems" operate where the firebox temperature is high enough to cause particles to fuse together into a liquid slag which is tapped from the bottom of the boiler and, after water quenching and cooling, is subsequently removed from the plant as lumps of clinker. This system is most frequently associated with cyclone-fired boilers.

"Dry systems" operate by dropping the hot ash particles directly into bins for water quenching and removal. The particles do not reach high enough temperatures in the boiler to fuse together.

Btu (British Thermal Unit) -- a standard unit of energy, equivalent to the heat required to raise one pound of water by one degree Fahrenheit at sea level. For example, the heat released by the combustion of coal is its heating (or calorific) value and is expressed in Btu per pound of coal.

Cyclone -- an air pollution control device, consisting of a structure without moving parts in which the velocity of an inlet gas stream is transformed into a confined vortex from which centrifugal forces tend to drive the suspended particles to the wall of the cyclone body. The particles drop out of the bottom of the cyclone and the gas leaves the top.

Cyclone-fired boiler -- a boiler in which combustion takes place in an adjoining cylinder; only heated gases enter the boiler firebox itself. The combustion of fuel is accomplished by inducing a swirling motion to the fuel and air, hence the name "cyclone."

Electrostatic precipitator -- an air pollution control device which removes particles, solid or liquid, from gaseous streams by the use of an electric potential between electrodes. Under the influence of the electric field, the particles in a gas become charged and move towards the electrodes, where they are deposited.

Federal Power Commission -- a government agency with the authority to regulate wholesale electric rates in interstate commerce, to regulate certain aspects of finance and accounting with respect to utility companies, and to encourage interconnection and coordination of electricity supplies.

FPC 67 -- a form issued annually by the Federal Power Commission to all utility companies operating plants with capacities exceeding 25 MW and systems exceeding 100 MW. When completed by the utility company, the form gives a comprehensive listing of equipment characteristics, air pollution control capabilities, cooling facilities, water sources and disposition, etc. The 1969 copy of FPC 67 contains all this information filled in by the utility company but in subsequent years, only changes to the parameters are noted. The "full" form is to be completed every 5 years.

Fluidized bed -- a bed of solid particles in which the particles are suspended in an upflowing stream of gas (or liquid). The particles are kept in a constant state of motion.

Fly ash -- ash from the fuel which leaves the boiler in the form of fine particles which are suspended in the exit combustion gases (compare with "bottom ash"). Fly ash is recovered by devices such as electrostatic precipitators.

Front-fired boiler -- in which fuel enters from a row of firing ports along the front of the boiler. Such boilers commonly have two or three chambers.

Generating capacity -- the maximum amount of electrical energy that can be generated by the steam raised in the corresponding boiler or plant. (See also Load factor)

Hammermill -- a machine used to shred solid waste in its raw, heterogeneous state, producing a more homogeneous material of small particle size. It consists of a number of large hammers mounted on a horizontal shaft which spin round and grind the solid waste against an iron grating until the material is shredded into particles small enough to drop through the openings in the grating.

Load factor -- the ratio of the average load (amount of power) supplied during a designated period to the maximum amount of electrical power that could have been supplied by the plant.

Megawatt (MW) -- one thousand kilowatts, a measure of the rate of energy generation or transfer.

Nomograph -- a chart which may be used to perform calculations by lining up the desired values of variables on a number of scales. Such charts are often used to perform a large number of calculations of the same type and can substantially reduce the working time required.

Opposed-fired boiler -- similar to a front fired boiler except fuel enters from ports in the back as well as the front.

Peakload boiler -- a boiler that operates only when the demand for electric power is high, such as during the day or during the summer. Peakload boilers are generally more costly to operate than baseload boilers. (See Baseload boilers)

Plant heat rate -- a measure of generating station thermal efficiency, usually expressed as the total Btu content of fuel burned or heat released from a nuclear reactor for the generation of 1 kilowatt hour.

Power plant -- a plant generating electricity for export to consumers, consisting of one or more boilers and one or more sets of generating equipment.

Pulverized coal -- coal that has been ground to a fine powder to ensure efficient combustion when "sprayed" into the combustion air and ignited. "Pulverized coal" may be compared with "crushed coal," which is a term usually used to signify coal that has been broken down into small pieces, around 1/4-inch in diameter.

Stoker-fired boiler -- in which coal is introduced onto a moving grate near the bottom of the boiler. The coal is in the form of crushed coal or bulk coal and it burns until the pieces are small enough to drop through the grate into the ash disposal system.

Suspension-fired boiler -- in which fuel enters and burns midway between the top and the bottom of the boiler and the heavy noncombustibles fall down into the bottom. Fuel is usually pulverized coal, oil, or gas. Some examples of a suspension-fired boiler are cyclone-fired, front fired, opposed-fired, and tangentially-fired boilers.

Tangentially-fired boiler -- in which fuel enters from each of the four corners of the boiler.

Wet collector -- an air pollution control device in which contact of the dust-laden gaseous stream with a liquid, specifically introduced for such contact, is used to remove dust particles.

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